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RISE OF INNOVATIVE BUSINESS MODELS: CONTENT DELIVERY METHODS IN THE DIGITAL AGE

HEARING

BEFORE THE

SUBCOMMITTEE ON
COURTS, INTELLECTUAL PROPERTY,
AND THE INTERNET

OF THE

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HOUSE OF REPRESENTATIVES

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RISE OF INNOVATIVE BUSINESS MODELS: CONTENT DELIVERY METHODS IN THE DIGITAL AGE

TUESDAY, NOVEMBER 19, 2013

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY,
AND THE INTERNET

COMMITTEE ON THE JUDICIARY

Washington, DC.

The Subcommittee met, pursuant to call, at 1:31 p.m., in room 2141, Rayburn Office Building, the Honorable Howard Coble (Chairman of the Subcommittee) presiding.

Present: Representatives Coble, Goodlatte, Conyers, Watt, Marino, Smith of Texas, Chabot, Issa, Poe, Chaffetz, Farenthold, Holding, Collins, DeSantis, Smith of Missouri, Chu, Deutch, Bass, Richmond, DelBene, Jeffries, and Lofgren.

Staff present: (Majority) Joe Keeley, Chief Counsel; Olivia, Lee, Clerk; and (Minority) Stephanie Moore, Minority Counsel.

Mr. COBLE. Good afternoon ladies and gentlemen. Welcome to the hearing.

The Subcommittee on Courts, Intellectual Property, and the Internet will come to order.

Without objection the Chair is authorized to declare recesses of the Subcommittee at any time.

We welcome all our witnesses today and those in the audience as well.

This afternoon we will hear from a group of a—from a panel of distinguished representatives, who are involved with some of the leading copyright policy in technology issues of our time. The benefits to America's economy, brought about by our Nation's copyright laws are the envy of the world. Our economy is stronger and generates more original creativity than in any other country.

Although probably true that the way I listened to music way back yonder, when I was growing up, is certainly not the way young people listen today. I can say with certainty that America's a better place when the creativity of our Nation's artists can be enjoyed by our society. And now that everyone seems to own a collection of handheld electronic devices, Americans have even more access to more content than any time in history.

One reason why this creativity exists is that our Nation's intellectual property laws are designed to reward those who invest their time and resources into the developing of original works of intellectual property. This intellectual property is not just embodied in a song, a book or a movie, but in the very device used to enjoy it.

Our Nation is also not hesitant when it comes to embracing new ways of doing business. For example it is safe to say that the Internet has simultaneously destroyed old business models while developing new ones.

One of our witnesses works for a company that has demonstrated how the Internet has created new business models. Built originally around the old-line distribution of books, Amazon has grown in less than two decades into a diversified company that recently announced a partnership with the U.S. Postal Service to expand home deliveries into Sunday in some cities. In this case, innovation is changing business models and driving government policy to help meet consumers' demand.

I look forward from all the witnesses this afternoon about the rise of innovative business models in the digital age and how consumer expectations are changing as a result.

Good to have you all with us.

I now recognize the Ranking Member, the gentleman from North Carolina, Mr. Watt, for his statement.

Mr. WATT. Thank you, Mr. Chairman.

And I am going to pass on the opportunity to make an opening statement because I really want to give the witnesses to testify. And I understand we are going to have a vote and I have got to be somewhere.

So, I—in the interest of time to get to the witnesses and hear their testimony, I think I will submit my statement for the record and yield back.*

Mr. COBLE. I thank the gentleman. And, as you have—Mr. Watt pointed out, there will be a vote, I am told, forthcoming. So, we will proceed accordingly.

If you all will bear with me just for a minute.

Let me, first of all, just ask you—each of you to stand, if you will, and we will. I will swear you in.

[Witnesses sworn.]

Mr. COBLE. Our first witness today is Mr. Paul Misener, Vice President for Global Policy, Public Policy at Amazon.com. For the past 14 years Mr. Misener has been responsible for formulating and representing the company's public policy position worldwide. Mr. Misener received his J.D. from the George Mason University School of Law and a B.S. in electrical engineering from Princeton University.

Our second witness today, Mr. John McCoskey, Executive Vice President and Chief Technology Officer at the Motion Picture Association of America. Prior to the MPAA, Mr. McCoskey was a—has served as Chief Technology Officer at PBS and Vice President of Product Development of Comcast Corporation. He earned his M.S. degree in computer science and technology management from

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*The information referred to was not available at the time this hearing record was printed.

Johns Hopkins University and his B.S. in electrical engineering from the Bucknell University.

Our third witness today, Mr. Sebastian Holst, Executive Vice President and Chief Strategy Officer at PreEmptive Solutions. In his position, Mr. Holst is responsible for product strategy and management aiming to protect software against reverse engineering and piracy. Mr. Holst is also a cofounder of The Mobile Yogi mobile app focusing on yoga. He received his degree from Vassar College and Harvard Business School.

Our fourth and final witness is Mr. David Sohn, General Counsel and Director for the Center on Democracy and Technology Project on Copyright and Technology. This project seeks to promote reasonable pro-consumer approaches to copyright and related policy issues. Prior to joining CDT in 2005, Mr. Sohn worked as Commerce Counsel for Senator Rob Wadden and practiced law at Wilbur, Cutler & Pickering. Mr. Sohn received his J.D. from the Stanford School of Law and his B.S. from Albers College.

And I think I heard a bell, so I think it might——

Why don't we start with our first witness and get the—and then with the bell I will go vote and we will return imminently.

If you gentlemen—we would like for you to confine your statements, if possible, within the 5-minute time range. And there is a model on your desk. When that red light appears, your time is running out. You won't be severely punished, however, but if you could stay within that time limit I would appreciate it.

TESTIMONY OF PAUL MISENER, VICE PRESIDENT, GLOBAL PUBLIC POLICY, AMAZON.COM

Mr. MISENER. I appreciate that, Mr. Chairman.

Mr. COBLE. Yes, sir.

Mr. MISENER. Thank you.

My name is Paul Misener and I am Amazon's Vice President for Global Public Policy.

Thank you and Mr. Watt for inviting me to testify here today about the digital content delivery.

Mr. Chairman, Amazon's mission is to be earth's most customer-centric company where people can find and discover anything they may want to buy online. In furtherance of that mission, we sell millions of different products in a wide variety of categories. But, Amazon was born as a media content delivery country—company with the provision of content to our customers and it remains a very important part of our business today.

When Amazon began selling online, in 1995, the content we sold was limited to the text, pictures and other graphics contained in physical books. Three years later, in 1998, we began to sell music and video content, also delivered on physical media, primarily audio compact disks and VHS videotapes.

When I began working for Amazon 14 years ago, our Web site had a customer support help page entitled, "Just what is a DVD?" That described the then new digital video disk technology. It included observations like, quote, "VHS video tapes are far too entrenched in the market to disappear any time soon," and, quote, "don't worry you won't have to trash your VCR, if you don't want to." Now, as antiquated as these observations seem to us today, the reality then and the reality now is that Amazon seeks to provide our customers the greatest selection of content using the best, most convenient technologies.

By the end of 2007, however, we had introduced digital download services for books, music and video. And now, when we speak of digital delivery, we speak primarily of digital content delivered electronically via the Internet. And so, our digital delivery business today is a natural continuation of origins as a place where customers can find and discover what they want to buy online.

Amazon Instant Video is a digital video streaming and download service that offers more than 150,000 titles. For digital music, the Amazon MP3 store currently has a growing catalog of more than 24 million songs in the United States. The Kindle digital bookstore opened 6 years ago this month and has grown to millions of books, newspapers and magazines. We now sell more kindle books than print books. And, remarkably, Kindle owners read four times as many books as they do prior to owning a Kindle.

Mr. Chairman, in addition to digital content obtained from traditional publishers, Amazon makes it easy for creators to self-publish their work. For example, the Amazon subsidiary CreateSpace provides digital content delivery of video via Amazon Instant Video. Similarly, authors may use Kindle Direct Publishing to publish books independently on the Kindle store. Amazon Studios is a new way to encourage the development and distribution of digital video content. As you may have seen in Friday's Washington Post, Amazon Studios has introduced its first comedy series, Alpha House.

Of course, Mr. Chairman, digital delivery of content to consumers requires some physical infrastructure and electronic devices. You probably have heard of cloud computing. And, as you may know, Amazon has a cloud computing business called the Amazon Web Services or AWS. Amazon Cloud Drive, which is built on AWS, lets customers manage and store music, videos, documents, and pictures through the Internet. In addition, the Amazon Cloud Player enables customers to securely store their personal music in the cloud and play it on a wide variety of devices including Kindle Fire. AWS helps enterprise customers with various data storage and computation needs. It also has partnered with Netflix for the delivery of digital content.

Digital content can be accessed and played through a wide variety of devices including a fabulous little box from Roku and available at Amazon that allows me to watch and hear Amazon instant video, as well as Netflix, Hulu and Pandora, directly on my family room TV. And you can read you Kindle books on a large number of devices and platforms. Importantly, customer expectations today are not only that an individual customer should be able to enjoy digital content on a single device of her choice, but also that she should be able to enjoy the same content across multiple devices.

One other, newly available place and time for enjoying digital content deserves mention. After working for years with the airline industry and others, Amazon is proud to have played a key role in the Federal Aviation Administration's decision just a few weeks ago to allow consumers to use their electronics, like Kindle, during airplane takeoff and landing.

In conclusion, Mr. Chairman, consumers are enjoying the benefit of innovative digital content delivery. And Amazon looks forward to working with the Committee to preserve those benefits in that innovation.

Thank you again for the opportunity to testify. And I look forward to your questions.

[The prepared statement of Mr. Misener follows:]

amazon.com

Testimony of

Paul Misener
Vice President for Global Public Policy, Amazon.com

Before the

United States House of Representatives
Committee on the Judiciary
Subcommittee on Courts, Intellectual Property and the Internet

Hearing on

"The Rise of Innovative Business Models: Content Delivery Methods in the Digital Age"

November 19, 2013

Good afternoon, Chairman Coble, Ranking Member Watt, and members of the Subcommittee. My name is Paul Misener, and I am Amazon.com's Vice President for Global Public Policy. On behalf of our company and customers, thank you for inviting me to testify today about digital content delivery.

Mr. Chairman, Amazon's mission is to be Earth's most customer-centric company, where people can find and discover anything they want to buy online. In furtherance of that mission, we sell millions of different products in a wide variety of categories including Electronics & Computers; Home & Garden; Tools; Toys; Kids & Baby; Grocery; Health & Beauty; Clothing; Shoes & Jewelry; Sports & Outdoors; and Automotive & Industrial. Just by shopping online at Amazon you can, for example, buy a lawnmower, a research microscope, a cardigan sweater, and a bottle of shampoo.

But Amazon was born as a media content delivery company, and the provision of content to our customers remains a very important part of our business today. When Amazon began selling online in 1995, the content we sold was limited to the text, pictures, and other graphics contained in physical books. We would buy physical books at wholesale, store them in our warehouses, and sell them at retail. The novelty at the time was that all the selling occurred over the Internet, and all the delivery was via the mail or other similar common carrier, like UPS or FedEx. Three years later, in 1998, we began to sell music and video content, also delivered on physical media, primarily audio compact discs ("CDs") and VHS video tapes.

When I began working for Amazon 14 years ago, our website had a customer support help page (entitled, "Just What *Is* DVD?") that described the then-new digital video disc technology. It included observations like, "VHS videotapes are far too entrenched in the market to disappear anytime soon," and "[d]on't worry – you won't have to trash your VCR if you don't want to." Well, as antiquated as these observations seem to us today, the reality then – and the reality now – is that Amazon seeks to provide our customers the greatest selection of content, using the best, most convenient technologies. And, at the time, before Blu-Ray discs and digital video streaming and downloads, DVDs provided the highest quality, most convenient video.

The DVDs we sold in those early days, along with audio CDs, contained the first types of *digital* content we delivered to customers. This digital content (bits of coded information that precisely represent text, sounds, and images) was, again, delivered only on physical media – the plastic discs themselves – by mail or other carrier.

By the end of 2007, however, we had introduced digital download services for books, music, and video, and now when we speak of *digital delivery*, we speak primarily of digital content delivered electronically, via the Internet. The content is the same, of course: digital bits that, once delivered, various electronic devices can convert into text, sounds, and images. And so our digital delivery business today is a natural continuation of our origins as a place where customers can find and discover content they want to buy online. And, unlike some other traditional media businesses, such as broadcasting, in which content is *pushed* out to consumers, our business remains one in which customers *pull* content to themselves; that is, content only gets in the mail – or gets on the Internet – to a customer when she orders it.

Today I will provide some current Amazon perspectives on (1) the types of digital content we provide our customers; (2) some novel sources of this digital content; (3) some infrastructure and electronic devices available to deliver and convert digital content for customers to enjoy; and (4) a few potential barriers to digital content delivery.

At Amazon, Mr. Chairman, we currently like to think of digital content in terms of our "digital ecosystem," which includes digital video, music, books, apps, games, and audiobooks.

Amazon Instant Video is a digital video streaming and download service that offers all Amazon customers the ability to access a huge catalog of videos: more than 150,000 titles including new release movies, classic favorites, and major TV shows. As you may know, Amazon Prime is an annual membership program for $79 a year that offers customers unlimited free two-day shipping on millions of items. Prime Instant Video is Amazon's video subscription offer that includes tens of thousands of movies and TV episodes that Amazon Prime members may stream at no additional cost.

For digital music, and using the "MP3" digital music format, the Amazon MP3 store currently has a growing catalog of more than 24 million songs in the United States that work on virtually any device that plays MP3s. And, linking the digital and physical media, Amazon AutoRip is a new service that gives customers free MP3 versions of audio CDs they purchase, including past purchases dating back to 1998.

The Kindle digital book store opened six years ago this month, and has grown to millions of books, newspapers, and magazines. We offer over a million titles that are $4.99 or less, and over 1.7

million titles that are $9.99 or less. Moreover, again linking the digital and physical worlds, we recently launched Kindle MatchBook, which offers customers the ability to buy – for $2.99 or less – the Kindle digital edition of a physical print book purchased from Amazon. So what does this mean for reading? Well, in May 2011, we announced that we now sell more Kindle books than print books on Amazon.com. And, remarkably, Kindle owners read *four times* as many books (print and eBooks) as they do prior to owning a Kindle.

The Amazon Appstore features over 100,000 apps, and can be accessed directly on a Kindle Fire, from any computer, or on an Android phone or tablet. And, Amazon's Game Services provides customers the ability to play games seamlessly across a wide range of devices including PC, Mac, Kindle Fire, and other Android mobile phones and tablets.

Lastly, an Amazon subsidiary called Audible is the leading provider of premium audiobooks on the Internet, with more than 100,000 audio programs from more than 1,800 content providers. These content sources include audiobook publishers, broadcasters, entertainers, and magazine and newspaper publishers. Audible also provides spoken-word audio products to Apple's iTunes store.

Mr. Chairman, in addition to digital content obtained from traditional publishers, Amazon makes it easy for creators to self-publish their work. For example, the Amazon subsidiary CreateSpace provides inventory-free, on-demand physical distribution of DVDs, CDs, and books, as well as digital content delivery of video via Amazon Instant Video. Similarly, authors may use Kindle Direct Publishing ("KDP") to publish books independently on the Amazon Kindle store. Authors can distribute globally, publishing once and reaching readers worldwide. This publishing takes less than five minutes and then the book appears on Amazon, generally within 24 hours. Using KDP, already over a dozen authors have sold more than a million copies each.

Amazon Studios is a new way to encourage the development and distribution of original digital video content, such as feature films and episodic series, and it's open to great ideas from creators around the world. Anyone can upload a script and Amazon Studios will review all submissions. Since launch, more than 19,000 movie scripts and 5,000 series projects have been submitted to Amazon Studios. And, as you may have seen in Friday's *Washington Post*, Amazon Studios has introduced its first comedy series, *Alpha House*. Available on Prime Instant Video, *Alpha House* is also the subject of a reception tonight here in Washington.

Of course, Mr. Chairman, delivery of digital content to consumers requires some physical infrastructure and electronic devices.

You probably have heard of cloud computing and, as you may know, Amazon has a cloud computing business called Amazon Web Services, or "AWS." Amazon Cloud Drive, which is built on AWS, lets customers manage and store music, videos, documents, and pictures through the Internet.

In addition, Amazon Cloud Player enables customers to securely store their personal music in the cloud and play it on a wide range of devices, including Kindle Fire. Cloud Player eliminates the need to download files before playing them, because all MP3 songs and albums purchased from Amazon – even those purchased in the past – can be automatically saved to Cloud Player. Customers can also import their music (including music purchased from iTunes or ripped from CDs) directly to Cloud Player.

AWS helps enterprise customers like Pinterest, Foursquare, and reddit with various data storage and computation needs. But it also has partnered with Netflix for the delivery of digital content: AWS enables Netflix to quickly deploy thousands of servers and terabytes of storage within minutes, and users can stream Netflix shows and movies from anywhere in the world, including on tablets and mobile devices such as iPhones.

As mentioned throughout my testimony today, digital content can be accessed and played through a wide variety of devices. Amazon Instant Video and Prime Instant Video are accessible through Kindle Fire, Wii, Xbox, PlayStation, iPads, iPhones, Macs, PCs, and hundreds of other compatible devices, including a fabulous little box from Roku – and available at Amazon – that allows me to watch and hear Amazon Instant Video (and Netflix, Hulu, and Pandora) directly on my family room HDTV.

As for devices to play music, Amazon MP3s work on virtually any device that plays MP3s, and can be played from Cloud Player on Kindle Fire devices, any web browser, iPhone, iPod touch, iPad, Android phone or tablets and, again, Roku home entertainment systems.

And you can read your Kindle books on the largest number of devices and platforms: they can be read on Kindle e-readers and tablets, as well as on iPhones, iPads, Android phones and tablets, Windows Phones, BlackBerrys, Macs, PCs, and in your Web browser with Kindle Cloud Reader.

Importantly, customer expectations today are not only that an individual customer should be able to enjoy digital content on a single device of her *choice*, but also that she should be able to enjoy the same content across *multiple* devices. For convenient reading and viewing, Amazon Whispersync synchronizes, among devices registered to the same account, the furthest book page read and last location in a video watched so that consumers can easily resume reading or watching where they left off. For example, this weekend I was watching the first episode of *Alpha House* on an HDTV set, with Prime Instant Video streaming through my Roku box, then paused the program and switched to a brand new Kindle Fire HDX to watch the remainder of the episode, starting where I had paused it.

One other newly-available place and time for enjoying digital content deserves mention. After working for years with the airline industry and others, Amazon is proud to have played a key role the

Federal Aviation Administration's decision a few weeks ago to allow consumers to use their electronics like Kindle during airplane takeoff and landing.

In closing today, Mr. Chairman, I would like to very briefly mention three potential barriers to digital content delivery. I welcome the Committee's announced plans to hold additional hearings, so perhaps these potential barriers can be addressed more fully in future sessions.

First, because there is no centralized information source on music publishers and songwriters, and no system for obtaining blanket licenses, digital music distributors must individually identify and locate the publishers and songwriters with an interest in each musical work. Perhaps the statutory license process could be streamlined to make it easier for music to be made available, while ensuring that songwriters, publishers, and artists are properly compensated.

Second, the risk of exorbitant statutory damage awards that the current system allows could chill the development of new products and services designed to help consumers enjoy copyrighted works. It may make sense to limit the availability of statutory damages in certain situations, such as where the defendant acted with a good faith belief that its use of copyrighted works was non-infringing or fair, or where the outcome turns on a novel question of law.

And, third, continued growth and innovation in digital content delivery assumes that the Internet will remain a non-discriminatory, open platform, where bits are bits and arbitrary limits do not inhibit consumer access to content. Consumer choice, without impairment, must be preserved.

In conclusion, Mr. Chairman, consumers are enjoying the benefits of innovative digital content delivery, and Amazon looks forward to working with the Committee to preserve those benefits and that innovation. Thank you again for the opportunity to testify. I look forward to your questions.

* * * * * * *

Mr. COBLE. Thank you, Mr. Misener.

Mr. McCoskey, we are going to try to get you in before we go vote. So, if you would proceed for 5 minutes.

TESTIMONY OF JOHN McCOSKEY, EXECUTIVE VICE PRESIDENT AND CHIEF TECHNOLOGY OFFICER, MOTION PICTURE ASSOCIATION OF AMERICA

Mr. MCCOSKEY. All right. Thank you, Mr. Chairman.

Chairman Coble, Ranking Member Watt and Members of the Subcommittee, my name is John McCoskey and I am Executive Vice President and Chief Technology Officer for the Motion Picture Association of America. Thank you for the opportunity to testify on behalf of the MPAA and its member companies. You have my written testimony, I would like to go through some of the highlights of that in my spoken words.

So, in the United States and throughout the world, an explosion of innovation is occurring, irrevocably changing much of our daily lives. The majority of consumers will experience this revolution in the way they consume the content that they love: the films, television series, and other video content they watch; the music they listen to; and, the books they read.

In the media and entertainment industry, digital technology advances are affecting everything from glass to glass, that is, every element between the camera lens and the screen where consumers experience our content. This is also a time of unprecedented change in consumer behavior. There are now more mobile devices than people in the United States, and smartphones and tablets have outpaced sales of desktop and laptop computers combined.

As the primary advocate throughout the world for American film, television and home video industries, MPAA and our member companies are committed to promoting a climate that provides audiences with as many options as possible for experiencing the great video entertainment our country produces.

Nearly 42 million homes in the United States now have Internet-connected media devices including game consoles, smart TVs and online set-top boxes. And more than 90 legitimate online services are already enabling those homes to download or stream movies and TV shows, and that number continues to grow. MPAA's wheretowatch.org Web site offers a one-stop shop for finding legal content to Americans.

And Americans are visiting these services at an incredible and growing rate. Last year alone, U.S. audiences consumed nearly 3.5 billion hours of movies online. Our member companies have embraced this movement of portability, flexibility and ease of access for viewers.

And one way they have done so is through UltraViolet, a free digital storage locker that allows a consumer, after purchasing UltraViolet media such as BlueRay, DVD or electronic purchase over the Internet, to then access that content on any UltraViolet-compatible device registered to them. Consumers have the option to either seamlessly stream the content or download it for later viewing without a broadband connection. Consumers can choose from a wide number of UltraViolet-enabled services like Flixster, Walmart's Vudu, Best Buy's Cinema Now, and so forth.

Our member companies, along with other in the Digital Entertainment Content Ecosystem consortium of more than 60 studios, retail stores, and technology firms, created UltraViolet to further enable consumers to watch what they want, when they want, where they want. And because UltraViolet is powered by such a diverse consortium of innovative companies, consumers are not locked to one portal and shift from one service to another as each continues to innovate. UltraViolet also enables sharing of content among up to five connected accounts and 12 devices. And more than 13 million accounts have registered for UltraViolet to date.

The overwhelming success of these legal services and distribution models in the bridging digital marketplace is a testament to the success of the U.S. copyright regime, which promotes investment in both creativity and delivery of content. Recognizing creators' property interest in their creations encourages them to create even more innovative content. And this in turn spurns investment in applications, services, devices, and other technologies for viewing that content.

The Copyright Act enables and encourages entrepreneurs to innovate and creates a competitive marketplace for these products and services. This is reflected in companies like Netflix, Hulu and Amazon, whose online streaming services began as distribution outlets for content created by others, but now also drive development of new original programming.

This is a transformative time for content creators and distributors of types, but especially for those working in the American film and television industry. Our industry supports nearly 2 million jobs in the United States. It is responsible for 108,000 businesses across all 50 States, and 85 percent of those employ fewer than 10 people. In 2011, the industry supported $104 billion in wages, $16.7 billion in taxes, and a $12.2 billion trade surplus.

And, as the marketplace continues to evolve in the digital age, we will continue embracing these innovations and the plethora of legitimate services for delivering content to consumers when they want, how they want, and on the platforms they want.

Mr. Chairman, Ranking Member, Members of the Subcommittee, I thank you again on behalf of the MPAA and our member companies for the opportunity to testify today. And we look forward to working with you, in the days, months and years ahead, to ensure that this revolution in content creation and delivery continues to be embraced by all members of the digital economy, and that creators and makers continue to be encouraged to experiment and innovative.

And I am happy to answer any questions you may have.

[The prepared statement of Mr. McCoskey follows:]

Statement of John McCoskey
Executive Vice President and Chief Technology Officer
Motion Picture Association of America

Before the House Judiciary Committee
Subcommittee on Courts, Intellectual Property, and the Internet

Hearing on "The Rise of Innovative Business Models:
Content Delivery Methods in the Digital Age"

Nov. 19, 2013

Chairman Coble, Ranking Member Watt, and members of the subcommittee, thank you for the opportunity to testify on behalf of the Motion Picture Association of America and its member companies. Today, both in the United States and throughout the world, an explosion of innovation is occurring, irrevocably changing much of our daily lives. Advances characterized by Moore's Law are giving us better, faster, cheaper electronics, computing power, storage, and communications. This can be seen in everything from the latest tablets and smartphones to automobiles with the ability to drive themselves. But where the majority of consumers will really experience this revolution is in the way they consume the content they love – the films, television series, and other video content they watch; the music they listen to; the books they read.

In the video business, these advances are affecting everything from "glass to glass," that is, every element between the camera lens and the projector or screen where consumers experience our content. This is also a time of unprecedented change in consumer behavior. There are now more mobile devices than people in the United States, and smartphones and tablets have outpaced sales of desktop and laptop computers combined.

As the primary advocate throughout the world for the American film, television, and home video industries, we are committed to promoting a climate that provides audiences with as many options as possible for experiencing the great video entertainment our country produces. Seemingly every week, our industry is rolling out innovative and often experimental offerings in response to consumer demand for more interactive, more immersive, and more portable entertainment. Whether in state-of-the-art cinemas, on the latest mobile devices, or on high-definition TVs, content creators are working every day on their own and in partnership with other technology companies to create innovative ways for audiences to easily access content.

Before televisions became commonplace in the 1950s American home, the only way audiences could experience the spectacles and remarkable storytelling of filmmakers was by sitting in a theater. More than half a century later, consumers have more options than ever for viewing their favorite content, and those options continue to grow almost daily. When watching on the silver screen, moviephiles can experience the latest cutting-edge visual and special effects in high-resolution digital 3-D and IMAX, surrounded by breathtaking digital sound. When at home, they can watch films and TV shows as they air or at the time of their choosing using a DVR, video-on-demand service, or Blu-Ray disc.

Nearly 42 million homes in the United States now have any number of Internet-connected media devices, including game consoles, smart TVs, and online set-top boxes. More than 90 legitimate online services are already enabling those homes to download or stream movies and TV shows, offering a service for every type of content consumer out there. Earlier this year, the MPAA created a website called wheretowatch.org, offering a one-stop shop to connect consumers to that growing list of legal Internet video services.

Americans are visiting these services at an incredible, and growing, rate. Last year alone, U.S. audiences legally consumed *nearly 3.5 billion hours* of movies online. They spent many of those hours using a smartphone, tablet, or other mobile device on services like TV Everywhere, Netflix, Hulu, HBO GO, VUDU, Amazon, Target Ticket, and EpixHD, to name just a few. And because of partnerships with innovative consumer electronics companies, consumers have many new options for enjoying our members' content in their living room, enabled by affordable and easy to use devices like Roku, Chromecast, AppleTV, Xbox, and Playstation.

Our member companies have embraced this movement of portability, flexibility, and ease of access for viewers. One way they have done so is through "UltraViolet," a free digital storage locker that allows a consumer, after purchasing UltraViolet media – such as a Blu-Ray, DVD, or electronic purchase over the Internet – to then access that content on any UltraViolet-compatible device registered to them. Consumers have the option to either seamlessly stream the content or download it for later viewing without a broadband connection. Consumers can choose from a number of UltraViolet-enabled services, like Flixster, Wal-Mart's Vudu, Best Buy's Cinema Now, Technicolor's M-Go and Barnes & Noble. Our member companies—along with others in the Digital Entertainment Content Ecosystem (DECE) consortium of more than 60 studios, retail stores, and technology firms—created UltraViolet to further enable consumers to watch what they want, when they want, where they want. And because UltraViolet is powered by such a diverse consortium of innovative companies, consumers are not locked in to one portal and shift from one service to another as each continues to innovate. UltraViolet also enables sharing of content among up to five connected accounts and twelve devices. More than 9,500 titles are available through UltraViolet, with the list growing every day. Consumers have registered more than 13 million accounts for UltraViolet to date.

The overwhelming success of these legal services and distribution models in the burgeoning digital marketplace is a testament to the success of the U.S. copyright regime, which promotes investment in both creation and delivery of content. Recognizing creators' property interest in their creations encourages them to create ever more innovative content. This in turn spurs investment in applications, services, devices, and other technologies for viewing that content.

The Copyright Act enables and encourages entrepreneurs to innovate and creates a competitive marketplace for these products and services. This is reflected in companies like Netflix, Hulu, and Amazon, whose online streaming services began as distribution outlets for content created by others, but now also drive development of new original programming. It can be seen with the recent YouTube Music Awards honoring the talents of both established stars and internet sensations; and it shows as Twitter – in partnership with leading content producers – continues highlighting the integration of social media platform with the TV viewing experience. And it is why all MPAA member companies stream their content online through their own sites, as well as through partner services. This includes advertisement-supported apps, like the NBC app, as well as apps powered by the TV Everywhere authentication model, like the TNT app, Watch ABC, Showtime Anytime and others. Each company has embraced online marketing through second-screen experiences like the distribution of exclusive content. And all of them use social media to interact with consumers on a regular basis. With licensing agreements under which consumers can rent films through YouTube, content creators are demonstrating a commitment to offer their high-quality content through the most popular platforms.

We are now entering an era many call the "Internet of things," where more and more devices are becoming "connected." According to estimates, 50 to 75 billion devices will be connected to the Internet by 2020. Many of those devices will be used to create, deliver, and consume media and entertainment content. But, in order to ensure that this growth in digital content and innovative delivery methods continues, it is imperative that all stakeholders in the digital ecosystem respect copyright in the digital environment. Everyone must do their part to protect the rights of creators and innovators. We all share a responsibility to curb abusive practices online that stunt investment in content, hurt the rapidly evolving digital marketplace, and harm the interests of consumers who benefit from these innovations. That means finding ways of working together in good faith on voluntary solutions where everyone shares in the responsibility of creating a healthy digital marketplace for the exchange of ideas, goods, and services; one that promotes creativity, investment, innovation, and job creation.

This is a transformative time for content creators and distributors of all types, but especially for those working in the American film and television industry. For more than a century we have produced programming that has inspired, thrilled, and educated audiences around the world. Our industry supports nearly 2 million jobs in the United States. It is responsible for 108,000 businesses across all 50 states, 85 percent of which employ fewer than 10 people. In 2011, the industry supported \$104 billion in wages; \$16.7 billion in sales tax, state income tax, and federal taxes; and a \$12.2 billion trade surplus.

We have been the beneficiaries of giant leaps in technology, and we are both media and technology companies ourselves. We have been responsible for our share of countless technological innovations thanks to the creative talent and skilled workers who call this industry home. We have made the transition from silent films to talkies; from projector reels to television;

from black and white to color; from analog to digital; from broadcast to cable and satellite, and now to the Internet. Stories once told exclusively on cinema screens are now told on screens of all shapes and sizes. We strive to adapt to the newest innovations and desires of consumers. As the marketplace continues to evolve in the digital age, we will continue embracing these innovations and the plethora of legitimate services for delivering content to consumers when they want, how they want, and on the platforms they want.

Mr. Chairman, Ranking Member, members of the subcommittee, I thank you again on behalf of the MPAA and our member companies for the opportunity to testify today. We look forward to working with you in the days, months, and years ahead to ensure that this revolution in content creation and delivery continues to be embraced by all members of the digital economy and that creators and makers continue to be encouraged to experiment and innovative. I am happy to answer any questions you may have.

Mr. COBLE. Thank you, Mr. McCoskey.

You all stand easy and we will return imminently.

[Recess.]

Mr. COBLE. We will resume the hearing.

I owe you an apology, I told you I would be back imminently, but our return is not so imminent. But, I had no control over that.

Good to have you, Mr. Holst. If you will be—if you will kick us off on the second event.

TESTIMONY OF SEBASTIAN HOLST, EXECUTIVE VICE PRESIDENT AND CHIEF STRATEGY OFFICER, PREEMPTIVE SOLUTIONS

Mr. HOLST. Okay.

Chairman Coble, Member Watt, distinguished Members of the Committee, my name is Sebastian Holst and I appear today wearing many hats.

I am the Chief Strategy Officer at PreEmptive Solutions. Our software products are used by tens of thousands of developers to secure and to monitor their apps, increasing app quality, improving user experience and securing intellectual property. I am an app creator who, along with my wife Dawn, have published a family of yoga apps for consumers and small businesses. I am the founder of a cyber-security and brand-monitoring service that provides threat analysis for public and private institutions. And I am also here representing the Association of Competitive Technology, ACT, the world's leading app association representing over 5,000 small and medium-sized tech companies.

Today I am pleased to have the opportunity to share a software developer's perspective as the Committee considers the transformative impact of emerging content delivery methods in the digital age.

To truly appreciate the magnitude of innovation occurring around us it helps to consider this one fact: no technology has been adopted faster by consumers than the smartphone ever; not the car, the microwave, not electricity, or even the Internet. And just what makes these smartphones so smart? Quite simply it is the apps they run. In just 6 years, smartphone apps have grown into a $68 billion industry and are expected to top $140 billion by 2016.

The industry's growth is also a job creation machine. Over 750,000 jobs in the U.S., and over 800,000 in Europe have been created through this new app economy. And with the median salary for a software developer topping $92,000, these are great jobs to have.

The rise of the mobile app economy has also significantly changed how apps are developed and marketed. Before the smartphone paradigm shift, developers faced enormous obstacles reaching consumers. We either sold packaged software in a store involving huge overhead or over the Internet where getting noticed was hard and managing payments and financial data could be exceptionally burdensome and even risky. Taken together these challenges posed significant barriers to entry and stunted growth.

And then came the smartphone app store: a simple, centralized one-stop shop for the consumer. In an app store a developer sells software directly to consumers. And, for a reasonable percentage of the topline, app stores handle financial transactions, product placement and ensure a safe, standardized shopping experience. With the app stores, consumers find that what—with app stores consumers find the apps they are looking for and developers can do what they do best—build great apps.

Of course app stores are not all created equal. How are stores curated? Meaning how apps are vetted for quality, truth in advertising, and even for how they use underlying hardware and network services can make the difference between a safe and satisfying shopping experience or one where malware, piracy and privacy risks cannot be safely ignored. Some of the most widely used—surprisingly, non-curated stores are popular. Some of the more widely used smartphones cater to this category. Yet, ironically, while usage is high in many of these "wild west" marketplaces, curated stores still deliver more than 75 percent of the revenues earned by app makers.

Another byproduct of app store popularity is that they are starting to exhibit some of the old problems. Specifically, with over a million apps available in app stores, discoverability, the ability to stand out in a crowd, is once again becoming difficult. But now developers have a better answer to this problem. Reputation, quality and a focus on users, experiences and their preferences are critical to standing out in a crowded marketplace.

One key innovation here has been the rise of application analytics. Application analytics provide visibility into user trends, end user behaviors and all manner of quality. Application analytics technology, like PreEmptive's, has emerged as one of the key competitive weapons successful developers are using to separate themselves from the rest of the pack.

Now some people will tell you that technology changes everything. But, when it comes to basic notions of right and wrong, fairness and innovation, nothing could be further from the truth. Thanks to technology, the potential for growth and innovation has never been higher. But that is why the need to stay grounded in our basic beliefs has never been greater. I am confident that a review of the copyright system will be successful, as long as we remain true to these principles that have guided our judgment on the universal themes of intellectual property, fostering innovation and fairness.

Thank you for the opportunity to speak here today. And I look forward to answering any questions you may have.

[The prepared statement of Mr. Holst follows:]

November 19, 2013

Testimony

Before the Committee on the Judiciary
The Subcommittee on Courts, Intellectual Property and the Internet

On The Rise of Innovative Business Models: Content Delivery Methods in the Digital Age

Sebastian Holst
Executive Vice President and Chief Strategy Officer, PreEmptive Solutions
Co-Founder, TheMobileYogi, LLC
Founder, Qi-fense, LLC.

Chairman Coble, Ranking Member Watt, and distinguished members of the committee. My name is Sebastian Holst and I have worked in the world of software and digital publishing for over 20 years.

Like many in today's "digital age," I am actively working in a number of different ventures – as a creator of content, software, and tools that help organizations large and small secure their own software, content, and embedded intellectual property.

I am the Chief Strategy Officer at PreEmptive Solutions, a company that protects software against reverse engineering, piracy, and tampering as well as monitoring production application usage to help improve application quality, user experience, and – ultimately – application value. Our clients include the manufacturers, financial institutions, healthcare providers, and – of course – software development companies. Over the past 8 years, I have worked closely with our 5,000+ clients to develop a deep understanding of their aspirations and their fears – aspirations and fears that are influenced in equal measure by new business opportunities, competitive forces, technology revolutions, cyber-threats, and regulatory obligations.

Customizable Analytics for All Your Applications
PreEmptive Solutions
Enterprise-Grade Protection

I am also a co-founder of TheMobileYogi. Along with my wife, Dawn, and another developer, David Poeschl, we develop mobile apps for consumers and small businesses – specifically, we publish yoga content (written instruction, images, video, and audio) dynamically delivered through apps across mobile devices (iOS, Android, and Windows Phone) and multiple marketplaces (iTunes, Google Play, Amazon, and Microsoft). In order to reach our target markets (individual yogis, yoga studios, and wellness organizations inside larger corporations) and monetize our work, we provide free apps with upgrades, in-app advertising, rebranding of our apps for our business clients, and other more nuanced business models only possible through the unique mix of mobile technology, online marketplaces, and software. Yet, at our core, we are publishing business; delivering content wrapped inside easy to use applications. Today, we have over 150,000 users and, perhaps as a consequence of delivering quality content, we have also had our content pirated; we have not only lost revenue, we have to compete against ourselves.

I also founded Qi-fense, a company that provides detective anti-phishing controls, data mining, and competitive intelligence through real-time analysis of phishing and spam campaigns. Today, this service is actively used by financial institutions, other cyber security firms, government agencies, and law enforcement. In this capacity, I see on a daily basis how trusted brands are hijacked and exploited to commit a broad spectrum of fraud targeting both consumers and businesses alike.

In addition, I am here today as a member the Association for Competitive Technology (ACT). ACT is a trade association which represents small and medium size software developers like me. Founded in 1998 by software developers, ACT supports app developers and innovative small business around the world. ACT has helped developers like me navigate law and government regulation and advocates for developers at all levels of government. I am one of thousands of developer members who have benefited from ACT's hard work and resources.

How Content Has Changed

The evolution of content delivery business models can be linked directly to the evolution of content itself. Business opportunities (and the potential for exploitation) have evolved in lock step with the expansion of what we mean by "content."

While we may call them by different names, writers, designers, and developers are all content authors and so it should come as no surprise that innovation is also occurring across (not just within) each of these categories as well.

How Content Delivery Business Models Have Changed

While the model for conveying digital content has changed considerably in recent years, the common threads have been discoverability, delivery, and payment. Each element has its own challenges still today, but overall, the new mobile app economy has significantly altered the barriers to entry faced by independent authors and software vendors.

For decades, the only way for a consumer to get any kind of content (books, movies, software, etc.) was to walk into a store and buy it in a box or case, or order by mail through a catalog. While on its face that process was relatively simple for the consumer, for the content author this model was costly, time consuming, and limiting.

For example, to get that box of software to the consumer, developers would have to find a publisher, pay for boxes, printing, physical disks, manuals, and shipping. Then, if developers wanted consumers to actually see the software, they had to pay the store for space in the Sunday flyer or catalog. Additionally, floor space in the actual store cost money -- to be featured on the end of a row, commonly called an end cap display, is "paid" space, not merely space that the stockroom decided how to use.

Factoring in all these expenses, the cost of putting software on the shelf could at times dwarf its initial development costs. Of the $50.00 purchased price at Circuit City, a developer might only see $7.00. These costs posed significant barriers to entry and proved insurmountable for many small publishers.

Then came the internet. Suddenly developers no longer had to pay for boxes. A developer could create a website, build a server system, pay for bandwidth, and have a virtual store. This change was life-altering when it came to delivery. The one-person shop could theoretically have the same access to customers as the largest companies who previously owned the floor space and Sunday flyers.

But it turned out that setting up your own website could be very lonely. If no one knew about the software, it didn't matter how quickly it reached the hands of the consumer. As discoverability persisted as a significant hurdle, search engine optimization (SEO) became a new cost for the developer in which the opacity of search engines was often confounding and frustrating.

Managing financial transactions proved another challenge. Acting as their own storefront, individual developers had to set up mechanisms to collect payment and manage credit-card data over the internet. If a box was still shipped, significant personal information was now collected and managed by the developer. Barriers had been lowered, but it was not perfect.

Fast forward to the advent of first the iTunes store, and then the Windows Mobile, Google Play, and Amazon storefronts. These stores handled our three key issues differently:

- **Delivery** - Where developers once had to rely on shelf space or individual websites, app stores now had a mechanism to deliver apps directly to the consumer. Further, mobile platforms offered a single point of sales – curated stores – which provided consumers a trusted place to find apps.

- **Discoverability** - Always difficult for small companies, mobile stores made it significantly easier for consumers to find our products. Developers no longer needed to worry about shelf space or getting lost in the wild west of the internet.

- **How You Get Paid** - Developers no longer had to figure out how to monetize their software, as the stores themselves handled the payment processing. With payments managed by the store, the developer could be free to concentrate improving and updating apps.

These changes made it easier for everyone to deliver their digital content to a wide audience. Ironically, however, the success of app stores has re-introduced some of the "discoverability" problems we faced in the past. With more than a million apps in the App Store, consumers have so many choices it can be difficult to identify what best suits them. Search engine optimization and paid promotions once again are becoming critical.

How and Where Developers Make Money

With the improvement of content delivery through app stores, the app economy has seen a meteoric rise. Just two years ago, total app industry revenues were $3.8 billion and expected to rise to $8.3 billion. However, by the end of last year we already reached $20 billion and are now projected to reach $140 billion by 2016.

With the growth of the app economy has come a growth in jobs. In December 2011, Michael Mandel determined that 466,000 jobs had been created in the app marketplace.[1] His July 2013 study has seen that figure rise above 750,000.[2] 73% of apps ranked top ten in their category are made by small companies and 65% of the most successful app companies are now hiring.[3] The growth is not limited to the US; a study from ACT last month showed that the apps economy has created over 800,000 jobs in Europe.[4]

For app developers, we have learned that not all app markets are created equal. To date, developers make nearly 11 times more money on applications sold though "curated" stores. These are storefronts where the applications shown to the user have either been vetted, or have had to meet fairly stringent guidelines. These "curated" stores are exemplified by Apple, Microsoft and Amazon's various stores.

Other apps are available with less review or constraint - interestingly, developers have not found these "wild west" marketplaces to be as profitable.[5] Moreover, recent studies, including one by Lookout, show that the less curated markets have more piracy, and are more dangerous for consumers in terms of malware and other deceptive practices.[6]

Developers and marketplaces continue to innovate and consumers have embraced a number of models that are unique to the app economy. These include:

- **Advertising-funded applications**: full function apps that are free to use but include advertising (akin to broadcast television).
- **Freemium applications:** apps with reduced functionality or time-limited access at no cost but the user can upgrade to the full-functhttps://www.lookout.com/resources/reports/state-of-mobile-security-2012ion version.

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[1] Michael Mandel, "Where the Jobs Are: The App Economy," TechNet (February 7, 2012), *available at* http://www.technet.org/wp-content/uploads/2012/02/TechNet-App-Economy-Jobs-Study.pdf

[2] Michael Mandel, "752,000 App Economy jobs on the 5th anniversary of the App Store," Progressive Policy Institute (July 8, 2013), *available at* http://www.progressivepolicy.org/2013/07/752000-app-economy-jobs-on-the-5th-anniversary-ofthe-app-store/.

[3] "The App Store After Five Years: What the Most Successful Apps Reveal about the Mobile Economy," ACT (July 19, 2013), *available at http://www.act4apps.org/wp-content/uploads/2013/07/The-App-Store-After-Five-Years-FINAL.pdf*

[4] "The European App Economy" ACT (September 2013) *available at* http://www.act4apps.org/appeconomy/europe/.

[5] Harry McCracken, "Who's Winning, iOS or Android? All the Numbers, All in One Place" TIME Tech (April 19, 2013) *available at* http://techland.time.com/2013/04/16/ios-vs-android/.

[6] "State of Mobile Security 2012" Lookout (2012) *available at* https://www.lookout.com/resources/reports/state-of-mobile-security-2012.

- **Corporate-funded applications:** full function apps offered at no cost because a separate entity (typically corporate) funds the enterprise to complement existing products.

- **In-app purchasing:** apps that provide users the opportunity to purchase additional features, access, or virtual-goods (enhancements for games, premium services, access to modular content, etc.). Typically, these involve no up-front installation cost.

TheMobileYogi combines all of these except in-app purchasing within our applications, but for the industry at-large that is one of the fastest growing models of consumer mobile apps today.

In order to streamline TheMobileYogi's offerings, we have created first class yoga instruction, innovated in how that content is displayed (by user-complaint for example), and even how we build (customize) our app to reduce the effort (and therefore our cost) to create custom versions of this general app. We have innovated (have intellectual property) at all three content levels.

Small businesses with no software background can now deliver their content to consumers in digital format right to their mobile device. Technology and the evolution of delivery methods have made it possible for businesses of all sizes and models to take advantage of the mobile market.

Application Analytics: telemetry to improve application quality and user experience

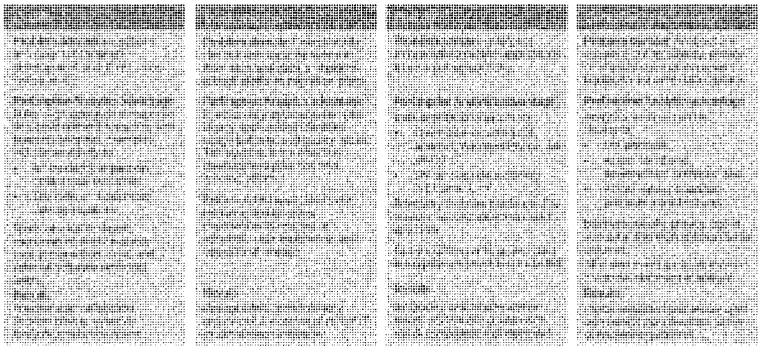
At TheMobileYogi, we also track how users use the app "in the wild" and use that information to improve the app itself and to provide evidence to clients of the adoption (and value) of their personalized app.

Mobile content delivery offers a variety of opportunities for app developers to gain more insight into how consumers are using apps. Mobile devices have unique capabilities (accelerometer, augmented reality, gyroscope, camera/scanner, gesture recognition, GPS and navigation, etc.) that drive unique development requirements which, in turn, spawn new development patterns and practices. One of the most notable is the expectation that some form of *application analytics* is always included.

PreEmptive Analytics is an *application analytics* solution that delivers insight and visibility into production application activity and user behavior. Spanning enterprise, web, mobile, and modern cloud, PreEmptive Analytics improves development and operational efficiency and increases the business impact and value of the applications they produce and manage.

PreEmptive Analytics measures and monitors application adoption, feature usage, user behavior and preferences, software quality, and production incidents

Principal PreEmptive Analytics use cases and scenarios include:



All companies are software companies and all apps will be mobile

Applications have emerged as the true workhorse of the 21st century economy— and, as such, represent both tremendous value and significant risk. Even as applications improve productivity and efficiency, they can be exploited, stolen, or used to disrupt the very organizations they serve.

Enterprises across industries, software vendors, and equipment manufacturers have all come to recognize a simple truth; operational and organizational success depends upon application success.

The success of the app industry is driven by the significant growth in use of mobile devices. Sales of these devices continue to outpace all predictions and are providing a huge boost to our economy. Total smartphone sales in 2011 reached 472 million units and accounted for 31 percent of all mobile device sales, up 58 percent from 2010. In the United States and Europe, smartphones sales have overtaken feature phones and the gap is widening.

Mobile connectivity has jumped beyond "consumer phones" to include all manner of commercial software and embedded devices. The marketplace model is being rapidly embraced by enterprises and enterprise software vendors as well. In other words, these business models are not only transforming consumer experiences, they are transforming the way all digital content is being created, distributed, and shared.

Securing Digital Content and Managing Associated Risks

As the value and importance of digital content increases, so does the urgency to secure that content and manage the risks that stem from its theft, subversion, and modification.

One of the special challenges protecting applications is the application must be readable by the operating system or else it cannot be run. As soon as an application can be run, it is often a relatively trivial exercise to "reverse engineer" or recreate the original source code and/or copy embedded traditional content. The risks that stem from this kind of access include:

- **Intellectual Property theft**: illegal use of traditional content, code snippets, or even an entire application.
- **Content theft**: branding, traditional content, documentation, etc. are stolen.
- **Counterfeiting**: distributing a look-alike application either for sale, to steal user information, or to embed malware – malicious software logic.
- **Service theft**: use knowledge of an application's logic to access other computer services and content that should only be accessed by that application – when this occurs, the costs for unauthorized access are borne by the original app owner.
- **Data loss and privacy violations**: understanding how data is managed and transmitted can lead to ways to gain unauthorized access.
- **Piracy**: understanding how authorization is granted can lead to understanding of how to "stub out" or circumvent these checks.
- **Malware**: additional logic can be injected into applications making what were safe applications a vehicle to deliver cyber-attacks.

As distribution of software has improved, piracy has become much more efficient. There are now pirate websites and stores and even uncurated app stores which bring the entire world of software in pirate form.

Last year, I was the victim of app piracy. One day, I discovered that I no longer had the top-ranked Yoga app. Curious to see what new release had bested mine, I looked at its features and was shocked to see my own app looking back at me. Aside from a different home page, almost all of the content was mine. The screen shots were all lifted right out of my app as well as my catchphrase "A pose for that." They even stole the four yoga instructional videos I filmed featuring my wife as the instructor and the background music I composed and performed.

It turns out the thief was from China; I brought my complaint to the app store and the offending app was taken down within 24 hours. I was lucky, but many developers aren't. Some app stores are far less responsive. I know of a kids app maker whose top-rated pre-K app was "brandjacked." Essentially, the culprits copied the name, logo, and appearance of a paid app and then offered it for free. Unsuspecting parents downloaded it only to discover that there was no real content inside. But having downloaded the app, they unwittingly installed malicious code that assumed control of the phone and sensitive data while running invisibly in the background. That app maker spent many months pleading with the app market before the offending app was removed.

In circumstances like these, developers lose money from lost app sales and ad revenue while their hard-earned user ratings plummet when the pirated versions don't perform as well. Developers also bear the added data usage and hosting costs when users of pirated copies access the content and services provided by the legitimate app. As such, even the theft of a free app can mean significant losses to an app maker. This isn't a victimless crime and the shame is that is happening for products with a price point that is generally a couple dollars or less. Sometimes it's free. Some apologists claim that content prices are too high and invite piracy, but can that really be the case for an app that's 99 cents - or free?

ACT conducted a study on the fifth anniversary of the Apple App store and found that 73% of apps in the top ten of their categories are made by small businesses. These are often startups and new companies for which profit margins can be very tight. The losses that come from stolen apps can mean the difference between success and failure; hiring staff or firing staff. That's why we feel the work that we do is so important.

PreEmptive Solutions created the obfuscation software category in the late 1990's and today is the leading provider of obfuscation technology hardening software running on mobile devices, traditional PC's, cloud platforms, and inside secure enterprise data centers.

Application analytics, quality, and security

If a developer believes their app is valuable enough to protect, they typically have a special interest in wanting to know how it's behaving (quality and performance) and how it's being used (to increase its value in future versions). In fact, the inability to secure code is a disincentive for developers to invest their time and resources in development – as is the inability to monitor quality of service or to gain insight into user preferences and behaviors.

PreEmptive Analytics goes to great lengths to ensure that the resulting collection, transmission, and management of application telemetry is also secure. Application telemetry is also first class content subject to all of the same privacy, security, and governance requirements as every other content category. PreEmptive Analytics includes the following:

- Development teams own their own data. PreEmptive asks for no rights to aggregate, inspect or resell your data.
- A two-level opt-in switch is included ensuring user opt-in to transmit runtime data from both regular usage AND application exceptions. The logic itself can be injected post-build for .Net and Java and can always be defined by the development organization.
- All data is, by default, encrypted on the wire.
- Device ID's (if they are collected at all) are hashed before they are transmitted.
- Tamper-detection and defense can be used to detect and defend against any attempt to alter or redirect runtime data transmission.
- Obfuscation can be used to obscure inspection by third parties of what is being collected and transmitted.
- Unique keys identify both the organization and the application source for data.

Application security, monitoring, and analytics are essential ingredients in the recipe for creating the optimal environment to encourage application development, innovation, and the economic benefits that inevitably follow,

Next Steps

The growth of digital storefronts like iTunes, Windows 8, Amazon Kindle, Google Play and many, many others show that technology is finding new ways to give consumers the content they want - in a form they like. Whether it's pay up front, pay by the month, ad supported, or some new form we haven't even considered, it all depends on Copyright law to ensure that the person who created the work chooses how to use it.

Therefore I hope that this committee remember three things as it continues its comprehensive review of copyright:

1. Copyright isn't just about movies and music, it's critical to the mobile app ecosystem as well.
2. Technology companies like mine are working hard to help developers and consumers get what they want, how they want it.
3. There's always room for improvement and new ideas. For our part, we plan to continue to innovate new ways to deliver amazing products; we rely on you to create an environment conducive to that innovation.

I would be happy to be involved in this process and provide my experience in the software industry.

Mr. COBLE. Thank you, Mr. Holst, I appreciate it.

Mr. Shaw—Sohn? Sir, am I pronouncing your name correctly?

Mr. SOHN. Sohn, yes.

Mr. COBLE. Sohn.

TESTIMONY OF DAVID SOHN, GENERAL COUNSEL AND DIRECTOR, PROJECT ON COPYRIGHT AND TECHNOLOGY, CENTER FOR DEMOCRACY AND TECHNOLOGY

Mr. SOHN. Chairman Coble, Ranking Member Watt, Members of the Subcommittee, on behalf of the Center for Democracy and Technology, thank you very much for the opportunity to participate in today's hearing.

My statement today will focus on how consumer expectations and behaviors are evolving in today's marketplace for copyrighted works. What I would like to do is highlight a few trends and then offer some thoughts on what those trends mean for congressional action on copyright.

So first, consumers increasingly expect the ability to get what they want when they want it. The Internet—Internet delivery—gives them convenience and immediacy. It also frees them from the limits of what is on TV at a particular time or what physical inventory will fit on the shelves at their local store. So, increasingly consumers expect to have comprehensive selection, to be able to pick precise content to suit their individual tastes, and to enjoy that content at times of their own choosing. In short, it is becoming more of an "on demand" world.

The second trend I would point to is the rising importance of mobility and portability. Rather than being tethered to a particular place or a particular device, consumers increasingly want seamless access to their content on a mobile basis and across multiple devices.

Third, and in some ways most significant, there has been a massive increase in creative activity by the public. Consumers today are not just passive recipients of creative material. They create and interact with copyrighted works as never before. They blog, they distribute photos and videos on social networks, they use excerpts of other works to create their own remixes or commentary. In sum, digital technology really blurs the lines between creators and consumers, enabling greater public involvement and interaction with creative works than ever before.

The good news is that distribution models and technologies are rapidly evolving in ways that both cater to and fuel these trends. There are new business models, such as streaming services based on subscriptions or advertising. Social networks play prominent new roles in empowering individual creators and artists to distribute works either with a commercial purpose or without a commercial purpose. Creative Commons offers a more diverse set of licensing strategies. New classes of devices, like tablets and e-readers, create new options for consumers.

In lots and lots of ways, the market is working. But, inevitably, it is also a work in progress. Responding to these kind of evolving demands is not a onetime challenge. It requires ongoing experimentation and innovation.

So, with these trends in mind, I would like to offer several thoughts for Congress's review of copyright law.

First, Congress should focus on ensuring that the legal regime encourages continued innovation to give consumers what they want. Now, to be clear, consumers are not legally entitled to on-demand access to everything they want any more than they are entitled to get everything they want for free. But, everyone is better off if the market can develop new offerings that recognize what consumers want and find ways to provide it lawfully. Because whenever legal services don't do a good job of catering to market demands, unlawful sources are out there waiting to fill the gaps. In the end, the best and most effective defense against widespread infringement is a robust and evolving content marketplace.

To promote that goal, Congress should start by taking care not to undermine those elements of the current regime that encourage marketplace and technology innovation. My written statement highlights three in particular: the safe harbor, set forth in section 512 of the DMCA; the "Sony doctrine" concerning products capable of substantial non-infringing use; and the flexible and hugely important doctrine of fair use.

Congress should also consider reforming the Copyright Act's statutory damages provisions. The current regime acts as a massive risk multiplier for any company or individual trying to navigate any unsettled area of copyright law. It therefore discourages innovation. And it undermines the trend toward public creativity and interaction by threatening individuals with disproportionate sanctions for any mistake they might make.

Another step Congress should consider is providing greater legal certainty for personal noncommercial uses, such as moving content among devices for one's own personal use.

And finally, Congress should make simplifying the Copyright Act one of the goals of any reform effort. As more and more of the public creates, remixes and otherwise interacts with copyrighted material, copyright needs to be easier for the public to navigate.

Once again, thanks for the opportunity to participate today. We look forward to working with the Subcommittee as its work on copyright continues.

[The prepared statement of Mr. Sohn follows:]

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Statement of David Sohn

General Counsel and Director, Project on Copyright & Technology
Center for Democracy & Technology

Before the

House of Representatives, Committee on the Judiciary
Subcommittee on Courts, Intellectual Property, and the Internet

Hearing on

"The Rise of Innovative Business Models:
Content Delivery Methods in the Digital Age"

November 19, 2013

Statement of David Sohn, Center for Democracy & Technology

On behalf of the Center for Democracy & Technology, thank you for this opportunity to participate in the Subcommittee's ongoing review of U.S. copyright law. CDT is a non-profit, public interest organization that seeks to promote free expression, privacy, individual liberty, and technological innovation on the open, decentralized Internet. With respect to copyright, CDT advocates balanced policies that provide appropriate incentives for creators without curtailing the unique ability of the Internet and digital media to empower users, speakers, and innovators.

My testimony today will first discuss several key trends regarding consumer expectations in the rapidly evolving copyright and media marketplace. It will then offer some thoughts on what those trends and expectations mean for possible congressional action in this area.

I. Trends and Consumer Expectations in Today's Marketplace for Digital Content

Widespread access to the Internet and digital technologies are reshaping consumer options, expectations and behavior concerning entertainment, media, and creative expression. The marketplace is evolving rapidly. Much is in flux, but several trends are evident and appear likely to continue.

A. Consumers expect "on demand" access – the ability to get what they want, when they want it.

Consumers increasingly expect "on demand" access to the entertainment and media content of their choice. They like the convenience and immediacy that electronic delivery can provide. With just a few clicks, the broadband Internet brings content of all kinds directly and immediately to Internet users. Digital delivery is increasing rapidly, as downloads and streaming replace trips across town to the record or video rental store.[1]

Consumers increasingly expect extensive and fine-grained choice as well. Rather than choosing a channel to watch based on "what's on" right now, consumers today use digital video recorders, video-on-demand systems, and various Internet-based services to seek out specific, individual programs and watch them at the time of their choice. Rather than buying albums, many consumers prefer to pick and choose individual songs. And consumers expect access to a wide and indeed comprehensive selection. They know that in the online environment, the range of works that can be offered is not limited by shelf space or the logistics of distributing and warehousing physical inventory. They want access not just to current and popular content, but also to what some have termed "the long tail" – the much larger number of works for which demand is scattered and idiosyncratic. As Internet users grow accustomed to having what feels like an unlimited universe of information right at their fingertips, limitations on choice feel anachronistic.

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[1] For example, digital distribution accounted for over 55 percent of the US music market in 2012; 162 million Americans watch online video; and nearly one quarter of American adults read e-books. Digital Media Association, *Digital Media: Growth, Innovations & Challenges 2013*, http://www.digmedia.org/images/stories/DiMA_Report_Growth_Innovations_Challenges_2013.pdf, at 7, 9, 10.

Finally, consumers increasingly rely on technology-based tools to discover and locate copyrighted works. Search engines enable users to quickly find information about any work they choose to query, including information about where to get access to it. Social networks keep users apprised of what their friends or acquaintances are reading, listening to, or viewing. Algorithm-based recommendation tools suggest content based on users' prior behavior or purchases. Projects like the HathiTrust Digital Library and Google Books, the latter the subject of a favorable court ruling just last week, enable users to do full-text searches through the contents of entire major research libraries. In short, technology offers rich options for identifying interesting and relevant copyrighted works.

B. Consumers seek mobility and portability.

Consumers also want to be able to access and enjoy copyrighted works on a mobile basis and from multiple devices. Smartphones, tablets, and e-readers let users enjoy access to copyrighted content on the move and wherever they go.[2] Cloud-based content-streaming services can provide access anywhere a user can get an Internet connection. And as devices with computing power proliferate, consumers generally don't want their content tethered to particular devices; increasingly, they want the convenience of being able to transfer their content seamlessly among a variety of networked devices used by themselves or their household. In short, consumers not only want the content of their choice *whenever* they want it; they want it *wherever* they want it too.

C. Consumers are creators too – not just passive recipients.

Central to any consideration of the current state of copyright law is the massive increase in the amount of creative activity that the public engages in online. Indeed, the term "consumer" is in some ways misleading in this discussion, as it fails to accurately reflect the public's current relationship to copyright and creation. Consumers today are not just passive recipients of copyrighted content created by large commercial media companies. They are creators of content in their own right, and they interact with digital content in much richer ways.

A tremendous amount of copyrighted material is created today on a non-professional or non-commercial basis, as well as by independent artists and creators operating outside the traditional copyright industry ecosystem. People write blogs; they use consumer-grade software to create music and video that not long ago would have required professional equipment; they self-publish books; they post photos and videos to social networks and user-generated content platforms. Over 100 hours of video are uploaded to YouTube every minute; 350 million photos are uploaded to Facebook each day;

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[2] The amount of video watched on mobile phones and tablets reportedly increased by 100 percent in 2012. Graeme McMillan, *Viewers Are Flocking to Streaming Video Content – And So Are Advertisers*, WIRED UNDERWIRE, Mar. 1, 2013, http://www.wired.com/underwire/2013/03/streaming-video-advertising.

Tumblr is home to 148 million blogs comprising 67 billion blog posts.[3] 54 percent of adult Internet users report post their own original photos or videos online.[4]

Moreover, digital technology facilitates a more participatory, interactive relationship with creative works. Excerpts from one creative work can be adapted and incorporated into new creations, spurring what some have termed a "remix" culture.[5] Songs purchased on an album can be rearranged and reordered into playlists of a user's choosing. Digital text can be searched, cut and pasted, or digitally annotated. Digital photos can be tagged or altered. And media of all sorts can be cut and spliced together to create commentary, criticism, and rich new forms of expression. This is not fringe behavior; of Americans who post their own videos online, 40 percent report making videos that creatively remix content.[6] Of course, some manipulations of creative work can raise issues under copyright law, but there is no question that the flexibility of digital technology facilitates greater involvement and interaction with creative works.

D. A variety of new distribution models and technologies are catering to evolving consumer expectations.

Business models and technologies are evolving in ways that both cater to and fuel the marketplace demands of Internet-age consumers.

Large volumes of commercially produced works are now available online not just for purchase, but also through services that offer access to an entire library of works on either a paid subscription or an advertising-supported basis.[7] Streaming, whether for Internet radio or movie rentals, has grown in popularity as an alternative to downloading. Internet-based "locker" services enable users to store their content on computer servers in the "cloud" and access it anywhere they have an Internet connection. Social networks and user-generated content platforms enable individual creators and artists to share and distribute their works either with or without a commercial purpose, and are increasingly being used by larger commercial creators as well. Social networks can even play a role in financing content creation: The majority of projects funded by Kickstarter, the crowdsourced financing site, have come from content-creation categories such as film and video, music, and publishing.[8] New licensing models, especially those developed by Creative Commons, empower creators with non-commercial objectives or non-traditional business strategies to disseminate their works broadly on terms that better suit their goals. Finally, device innovation plays a key role in the content distribution marketplace as well, as devices such as e-book readers, tablets, and digital video recorders give users new options for engaging with copyrighted works.

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[3] YouTube Statistics, http://www.youtube.com/yt/press/statistics.html (accessed Nov. 17, 2013); Joel Kotenko, *Facebook Reveals We Upload a Whopping 350 Million Photos to the Network Daily*, DIGITAL TRENDS, Sept. 18, 2013, http://www.digitaltrends.com/social-media/according-to-facebook-there-are-350-million-photos-uploaded-on-the-social-network-daily-and-thats-just-crazy/; About Tumblr, http://www.tumblr.com/about (accessed Nov. 17, 2013).

[4] Maeve Duggan, *Photo and Video Sharing Grow Online*, PEW RESEARCH CENTER, Oct. 28, 2013, http://pewinternet.org/Reports/2013/Photos-and-videos.aspx, at 2.

[5] For a recent and extensive discussion of the role and value of remixing to culture and creativity, see Organization for Transformative Works, Comments to the Dept. of Commerce Internet Policy Task Force, Nov. 13, 2013, http://transformativeworks.org/sites/default/files/Comments%20of%20OTW%20to%20PTO-NTIA.pdf.

[6] Kristen Purcell, *Online Video 2013*, PEW RESEARCH CENTER, Oct. 10, 2013, http://pewinternet.org/Reports/2013/Online-Video.aspx, at 14.

[7] Music subscription services, for example, saw a 44 percent rise in paying customers in 2012. Digital Media Association, *supra* note 1, at 7.

In short, much has changed in a relatively short time. But today's marketplace is very much a work-in-progress. New business models and technologies will continue to emerge. Some will be more successful than others, and some will pose serious challenges to entrenched legacy business models. As discussed in the next section, copyright law should seek to facilitate this evolution, not to protect specific business models or otherwise forestall innovation and change.

II. What This Means for Copyright Reform Legislation

The trends discussed above carry several implications for Congress's review of copyright law.

A. Congress should focus on ensuring that the legal regime encourages continued innovation in the marketplace.

Responding to the marketplace trends and expectations described above is an ongoing challenge that will require ongoing experimentation and innovation. In reviewing copyright, Congress should focus on how the law can accommodate and encourage robust continued innovation in the marketplace to meet evolving expectations for the distribution and enjoyment of both commercial and noncommercial creative works.

To be clear, the fact that consumers increasingly expect "on demand" access to the copyrighted content of their choice does not mean they are legally entitled to it, any more than they are legally entitled to get it all for free. Copyright holders enjoy the exclusive right to distribute their works and thus are generally entitled to do so on terms of their own choosing. But where the market fails to cater to substantial consumer appetites, that represents a lost opportunity. Everyone is better off if the market can develop new offerings that recognize what consumers want and find ways to provide it.

Having access to a wide variety of legal offerings that meet consumers' diverse and evolving preferences is obviously in the interests of consumers themselves. It is consistent with copyright's fundamental objective of "enriching the general public through access to creative works."[9] It is also, however, crucial to the broadly shared goal of reducing copyright infringement.

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[8] Derek Slater and Patrick Wruuck, *We Are All Content Creators Now: Measuring Creativity and Innovation in the Digital Economy*, THE GLOBAL INNOVATION INDEX 2012, http://www.wipo.int/export/sites/www/econ_stat/en/economics/gii/pdf/chapter11.pdf, at 165.

[9] *Fogerty v. Fantasy Inc.*, 510 U.S. 517, 527 (1994).

The success of iTunes – which earlier this year announced its 25 billionth download[10] – has demonstrated conclusively that it *is* possible to "compete with free." The lesson of this and the rest of the growing online copyright marketplace is that if lawful services are slick, easy to use, and offer comprehensive choice, consumers are happy to use them. But it also remains true that if lawful services fail to give consumers what they want, when they want it, unlawful sources will be out there, waiting to fill the gaps and satisfy the unmet demand. In a world in which information technology has made incredibly powerful tools for copying and disseminating data cheap and ubiquitous, no amount of wishing and no enforcement strategy will be able to fully eliminate unlawful sources of copyrighted material.

As Congress considers copyright reform legislation, therefore, it should keep in mind that a robust and evolving content marketplace providing convenient and attractive options for satisfying consumer demand is the best defense against widespread infringement.[11] Encouraging the continued development of innovative business models and technologies is the most productive thing Congress can do.

B. Congress should be careful not to undermine those elements of the current regime that promote marketplace and technology innovation.

Encouraging continued marketplace innovation requires, first, being careful not to undermine those elements of the current legal regime that have proved essential to much of the innovation that has occurred to date. I would highlight three: the safe harbor set forth in DMCA section 512; the so-called "Sony doctrine" concerning products capable of substantial non-infringing uses; and fair use.

The section 512 safe harbor protects online service providers, if they meet certain conditions, from monetary liability for infringements that may occur over their systems. This protection has been nothing short of indispensable to the development of social networking and user-generated content platforms – the platforms that are empowering the explosive expansion of creative activity by individual creators and that are becoming increasingly important channels for commercial content as well. Litigants in several major lawsuits have sought to constrain section 512 in ways that would have rendered it inapplicable to most of today's online services, but courts have rejected those efforts and confirmed section 512 as a key facilitator of innovation.[12]

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[10] Apple, *iTunes Store Sets New Record with 25 Billion Songs Sold*, February 6, 2013, http://www.apple.com/pr/library/2013/02/06iTunes-Store-Sets-New-Record-with-25-Billion-Songs-Sold.html.

[11] Indeed, studies earlier this year regarding Norway and the Netherlands claim that the rise of lawful services such as Spotify and Netflix has caused infringement in those markets to decline. *See* Sophie Curtis, *Spotify and Netflix curb music and file piracy*, THE TELEGRAPH, Jul. 18, 2013, http://www.telegraph.co.uk/technology/news/10187400/Spotify-and-Netflix-curb-music-and-film-piracy.html; Janko Roettgers, *Charts: How Spotify is killing music piracy*, PAIDCONTENT, Jul. 18, 2013, http://paidcontent.org/2013/07/18/charts-how-spotify-is-killing-music-piracy/.

[12] *See, e.g., UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 667 F.3d 1022 (9th Cir. 2011); *Viacom International Inc. v. YouTube Inc.*, 2013 WL 1689071 (S.D.N.Y April 18, 2013); *see also* David Sohn, *Court Ruling in YouTube Appeal Is (Mostly) a Win for Internet*, Apr. 5, 2012, https://www.cdt.org/blogs/david-sohn/0504court-ruling-youtube-appeal-mostly-win-internet.

The *Sony* doctrine, established in the 1984 Supreme Court case that rejected a copyright challenge to the VCR, states that it is lawful to make a product that may have some infringing uses, so long as the product is capable of substantial non-infringing use.[13] This principle has been central to the development of multipurpose information technology devices that today play key roles in the marketplace.

Fair use, codified in section 107 of the Copyright Act, is a flexible provision that helps the law accommodate a wide range of beneficial activity and free expression. It facilitates the rise in consumer creation, providing a legal basis for activities such as quoting, remixing, and parody. It facilitates consumer choice and interaction with digital content, such as the "time shifting" functions of VCRs and DVRs. And it enables technology-based tools that help users discover and locate copyrighted works, from search engines themselves to the mass-digitization projects recently upheld in the HathiTrust and Google Books decisions.[14]

Continued innovation and development in the online content marketplace would suffer greatly if Congress were to narrow or otherwise undermine any of these three legal principles.

C. Congress should consider reforming Copyright Act's statutory damages provisions.

The current statutory damages regime can serve as an obstacle both to marketplace innovation and to the public's increasingly participatory relationship to content and creation. Statutory damages reform should be a priority item for Congress to consider in any review of copyright law.[15]

The current statutory damages framework is a massive risk-multiplier for any company or individual trying to navigate the often unsettled contours of copyright law. That can chill innovation, because history shows that innovators and their investors seeking to develop new products and services often have to contend with copyright disputes. Examples of new technologies sued on copyright grounds range from VCRs to mp3 players to search engines for images to video-sharing websites and many more. The statutory damages regime makes each such dispute literally a "bet the company" issue, with damage potential in the hundreds of millions or even billions of dollars. Many would-be innovators would quite rationally shy away.

Statutory damages also create outsize risks for the increasingly creative and interactive behavior of consumers. In particular, the high stakes can discourage expressive activity that relies on fair use, since fair use analysis is too fact-specific to provide consumers with certainty regarding what is and is not fair use. Statutory damages are at the heart of the "orphan works" problem too, because any use of a work whose author can't be found carries the risk of exorbitant damage awards if the author later surfaces. As digital technology enables the public to interact with content in new ways, the statutory damages regime threatens the possibility of disproportionate sanctions for behavior that seems far removed from anything one might call "piracy."

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[13] *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

[14] *See Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007); *Kelly v. Arriba Soft Corporation*, 336 F.3d 811 (9th Cir. 2003); *Authors Guild, Inc. v. Google Inc.*, 05 Civ. 8136 (S.D.N.Y., 2013); *Authors Guild, Inc. v. HathiTrust*, 11 Civ. 6351 (S.D.N.Y., 2012).

[15] For a longer discussion of the problems associated with the current statutory damages regime, see CDT's recent comments to the Dept. of Commerce's Internet Policy Task Force, https://cdt.org/comments/comments-us-commerce-dept-internet-policy-task-force. *See also* Pamela Samuelson and Tara Wheatland, *Statutory damages in copyright law: A remedy in need of reform*, 51 WILLIAM & MARY L. REV. 2, 439 (2009), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1375604.

D. Congress should consider providing greater legal certainty for personal, non-commercial uses.

Congress should also consider providing greater legal certainty for functions that cater to consumers' growing interest in mobility and portability. It may often be fair use for consumers to move their legally acquired content among devices for their own personal uses – but, as noted above, the contours of fair use are uncertain and the consequences of any misstep can be severe. Carving out a more explicit exception for personal, non-commercial uses could benefit consumers.

E. Simplifying the Copyright Act, so that the general public can better navigate it, has an important place in reform efforts.

In light of the explosive growth in non-commercial, consumer-based creation, copyright law can no longer be the sole province of a relative handful of highly specialized companies and lawyers. As the Register of Copyrights observed earlier this year, this means there is a growing need for the nation's copyright statute to be readable and accessible to non-experts.[16] Much of today's Copyright Act is nothing short of byzantine and inscrutable. Simplification should have an important place in any discussion of reform.

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CDT appreciates the opportunity to participate in today's hearing. We look forward to continuing to engage with the Subcommittee as it proceeds with its review of this important topic.

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[16] *The Register's Call for Updates to U.S. Copyright Law – Hearing before the House of Representatives Committee on the Judiciary Subcommittee on Intellectual Property, Competition, and the Internet*, 113th Cong., 1st Session (Mar. 20, 2013) (Statement of Maria Pallante, Register of Copyrights of the United States) ("Because dissemination of content is so pervasive to life in the 21st century, the law also should be less technical and more helpful to those who need to navigate it . . . [I]f one needs an army of lawyers to understand the basic precepts of the law, then it is time for a new law.").

Mr. COBLE. Thank you, Mr. Sohn.

I appreciate the testimony from each of the witness. And I appreciate those in the audience. Obviously, your presence here represents more than a casual interest in the subject at hand.

Gentlemen, we try to comply with the 5-minute rule as well. So, if you all could keep your responses terse, we would appreciate that.

Mr. Misener, as your company has grown, what challenges, from a copyright perspective, have you faced?

Mr. MISENER. Thank you, Mr. Chairman.

There are three that I have outlined in my written statement and I can briefly summarize them here.

One is with respect to music licensing. The process is very difficult and cumbersome. If the policy goal is to get as much copyrighted works available out to paying consumers, this—the current process for licensing is in need of reform.

Second, as Mr. Sohn has just described, the statutory damages provisions currently in law are—can produce some exorbitant penalties and create high risks for—especially for large libraries of copyrighted works. And it seems to me that those damages might be limited in some way that recognizes good-faith efforts to not infringe or to use fair use or when a defendant faces a novel question of law.

And lastly, all of this innovation depends heavily on maintaining an open and nondiscriminatory Internet.

Mr. COBLE. Thank you, Sir.

Mr. Holst, with extremely low or even no-cost price points for apps, what justifications do you hear from pirates who cannot claim that prices are too high as a justification for their theft?

Mr. HOLST. The fact that an application is either free or low-cost doesn't really represent either the work that has gone into it or the strategy—the total market strategy. From a risk point of view, pirating and counterfeiting of these free apps essentially is equivalent of being able to deliver counterfeit car parts or pharmaceuticals. So, very often, branded, recognized software is remarketed and redistributed with certainly nefarious motivations.

Mr. COBLE. I thank you, sir.

Mr. McCoskey, for you and Mr. Sohn. What are the most effective ways, in your view, to convince consumers to use legitimate alternatives to online piracy?

Mr. MCCOSKEY. One of the things we try to do is actually make sure that consumers know that there are legitimate sources of content. And that is one of our challenges in this ecosystem, we got all these different players, actually being able to get those legal access to content in front of consumers, when there is a mix of access to illegal content. So, a big part for us is, not only creating paths and distribution mechanisms where we do distribute this content legally, but also getting consumers ways where they can find that content.

Mr. COBLE. Thank you, sir.

Mr. Sohn?

Mr. SOHN. I think it is largely a question of having lots of choice and lots of innovation in the marketplace. It is going to require experimentation to see what forms of services consumers are most interested in. But, I think the early success of iTunes, which was kind of a pioneer in digital music, showed that when services give consumers a broad selection at an attractive price point and a service that works well, consumers are interested in using the lawful marketplace.

Mr. COBLE. Thank you, sir.

The Chair is recognizing the Ranking Member for the full Committee, the distinguished gentleman from Michigan, Mr. Conyers.

Mr. CONYERS. I would yield to the gentlelady, Ms. Chu, if it is all right with her and you.

Mr. COBLE. It is fine with me, if it is okay with her.

The gentlelady from California, Ms. Chu?

Ms. CHU. Thank you so much, Mr. Chair.

Well, first I would like to submit for the record three items. First is testimony from Sandra Aistars, Executive Director of the Copyright Alliance. Ms. Aistars testimony illustrates that it is not just major motion picture studios and TV show creators who are inventing—investing and supporting new distribution models, but an entire alliance of creators, from church music publishers to remixers to medical illustrators to illustrators, who are engaging in expanding in all kinds of digital delivery models. Which demonstrates that copyright owners of all mediums and backgrounds work actively to ensure that their work is easily accessible and can be enjoyed as widely as possible.

And then the second is a study that was released today from the Intellectual Property Alliance, which solidifies the fact that U.S. copyright industries, for the first time, contributed over $1 trillion to the U.S. economy accounting for nearly 6.5 percent of GDP. I mean, obviously, with this report, we know that creative rights are driving economic growth and innovation.

And thirdly, I am submitting a Copyright Alliance article about this intellectual property report.

Mr. COBLE. Without objection, they will be received——

Ms. CHU. Thank you.

Mr. COBLE [continuing]. And made a part of the record.

[The information referred to follows:]

Statement for the Record
Sandra M. Aistars, Executive Director, Copyright Alliance
Before the Committee on the Judiciary
Subcommittee on the Courts, Intellectual Property and the Internet

The Rise of Innovative Business Models: Content Delivery in the Digital Age

November 19, 2013

The Copyright Alliance is a non-profit, public interest and educational organization of artists, creators, and innovators of all types. Our members include artist membership organizations and associations, unions, companies and guilds, representing millions of creative individuals. We also collaborate with and speak for thousands of independent artists and creators and small businesses who are part of our One Voi©e activists group. On issues of copyright policy there is more that unites than that divides artists, creators and innovators, which is why we can bring together such a broad spectrum of creative voices under one umbrella.

Copyright Alliance members unequivocally and enthusiastically support new distribution models for their creative work. Innovation in the creation and distribution of creative works is happening throughout our membership and all across the spectrum of creators – from major motion picture companies and television show creators, to young, indie filmmakers, and from church music publishers to remixers and authors of fan fiction. As a result, audiences have never had as many options for enjoying and interacting with creative works.

We will catalog here some of the many ways in which members of the Copyright Alliance are innovating in the delivery of their works to consumers, but as Congress reviews the landscape of online business models, it should keep the following key principles in mind:

Innovation is driven by meaningful individual rights.

The Framers of the Constitution believed that "[t]he public good fully coincides with the claims of individuals,"[1] Accordingly, in ensuring authors' rights would be protected, the focus of copyright law has properly been first on the author, but the ultimate effect is a benefit to society at large.

> "The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and the useful Arts.' Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered."[2]

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[1] Madison, Federalist Paper 43, p. 272 (C. Rossiter ed. 1961).

[2] Mazer v. Stein, 347 U.S. 201,219 (1954).

Innovation is also driven by a meaningful ability to license creative works. Market-based principles such as respect for private property and encouragement of private ordering provide the most efficient way to incentivize the creation and distribution of the works that draw consumers to online services. Licensing creates a dynamic marketplace that affords creators and distributors the flexibility to give consumers a range of choices – what they want, when they want it, at a variety of price points.

Providing new legal business models is only one side of the coin; there is still a need to address illegitimate services.
A survey of the academic literature on the effect of piracy on media sales demonstrates that the growth of a sustainable online creative market is inhibited by piracy. In a study by Brett Danaher, Michael D. Smith, and Rahul Telang, *Piracy and Copyright Enforcement Mechanisms*, the researches note that the best way of promoting sustainable markets for creative works is through a combination of innovation by the owners of such works and government policies aimed at reducing infringement:

> "when taken as a whole, the academic literature shows that demand- and supply-side interventions can be effective in increasing media sales by reducing the utility of consuming pirated content relative to the utility of legitimate content." Danaher concludes, "the ease of access to content through legitimate channels, and the timing of legitimate channels relative to pirated availability are important components of the consumer's decision whether to pirate or purchase. But this alone does not mean that the burden of competing with piracy should fall entirely on the shoulders of producers. For example, producers could make their products vastly more appealing by setting the price to zero, but few would suggest that this solution is ideal (in such a scenario, as discussed above it seems difficult to imagine that the quality and quantity supplied would not be affected). Rather, it seems as if a combined approach could be implemented, with government policies acting to decrease the appeal of illegal filesharing (effectively raising the "price" of piracy) while producers simultaneously attempt to deliver products to consumers with appealing timing, convenience, and quality." [3]

Reducing infringement need not be achieved solely through legislation or government policies. Indeed, as we noted in written testimony during this Committee's previous copyright hearing on *The Role of Voluntary Agreements in the U.S. Intellectual Property System*, the Copyright Alliance enthusiastically supports the use of cross-industry collaborative efforts to address the problem of online infringement, and urges this Committee to use its oversight authority to encourage stakeholders to find solutions to the challenges of online infringement without the need for legislation.

Artists, Creators and Innovators are Embracing New Distribution Methods.

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[3] Brett Danaher, Michael D. Smith, and Rahul Telang, *Piracy and Copyright Enforcement Mechanisms*, Prepared for Inclusion in Innovation Policy and the Economy, Volume 14 (May 2013) *available at* http://www.nber.org/chapters/c12945.pdf.

Spurred by business imperatives, Copyright Alliance members are already aggressively pursuing a variety of new business models for funding the creation of their works, drawing new audiences and ensuring that creative fans have the ability to interact with copyrighted works in myriad new ways. To facilitate your understanding of the current state of the online marketplace, we provide this synopsis of some of the efforts of our members.

The Online Marketplace is Growing With the Support of Artists and Creators
It is undeniable that the legitimate online marketplace for works of entertainment and education such as films, music and books is diverse and growing, supported by artists, creators and innovators in our membership.

- AMAZON
    - Supported by our members, Amazon's Kindle Store licenses over two million eBook titles and thousands of newspapers and magazines. Its Amazon mp3 service accounted for 22% of all paid music downloads in the last quarter of 2012,. Amazon Instant Video offers over 150,000 titles for purchase or rent and over 41,000 to stream. In 2012, this service accounted for 18% of U.S. video on demand movie rentals, 10% of sell-through movie sales, and 8% of sell-through television sales. Since its launch in 2012 as a way to develop films and television series, Amazon Studio has received more than 18,000 movie scripts and 4,000 series projects.

- APPLE
    - Fully licensed by Copyright Alliance members, Apples' iTunes service hit the sales milestone of 25 billion songs sold in February of 2013. As of May 2013, just after its tenth anniversary, iTunes had over 26 million songs available for download.
    - In its first five days on the market, iTunes Radio attracted 11 million unique listeners. If adoption continues at this rate, iTunes Radio will have more than 66 million users at the end of its first month in operation.
    - iBooks - This app for purchasing ebooks has been downloaded more than 130 million times worldwide and currently boasts over two million titles available for download.
    - Hundreds of newspaper and magazine apps are available to download from the Newsstand iTunes app store.

- GOOGLE
    - Google Play - Launched in March of 2012 the service provides consumers with access to music, movies and news. From March of 2012 to March of 2013, the Google Play store added one million eBook titles, bringing its total number of eBook titles to more than five million.

    - Google Play Music All Access - In May of 2013, Google released a service where subscribers can stream more than 18 million songs and download up to 20,000 songs.

- NETFLIX
    - In the first three months of 2013, Netflix had revenue of $1 billion and subscribers streamed more than four billion hours of content during this time, bringing the monthly average to over one billion hours. From April to June 2013, Netflix gained 630,000 subscribers, bringing its total to nearly 38 million subscribers in 40 countries. Netflix's stock is up 248% in 2013.

- HULU
    - In the first quarter of 2013, Hulu topped four million subscribers, and users streamed more than one billion videos. Hulu offers over 2,500 television series and generated $695 million in revenue, in 2012 a 65% increase from 2011.

- SPOTIFY
    - As of March 2013, Spotify had over 24 million registered users, including 6 million paying subscribers. As of April 2013, Spotify licensed over 20 million songs with an average of more than 20,000 new songs added per day.

- PANDORA
    - In 2012, Pandora users listened to more than 13 billion hours of music, one million songs, and 100,000 artists. Pandora's August 2013 metrics revealed that users listened to 1.3 billion hours of music. Pandora's share of total U.S. radio listening was 7.46% with 72.1 million active users.

- TUNEIN
    - TuneIn currently has over 40 million active listeners, two million of which listen in their cars via dashboard integrations and car-mode listening. In the first four months of 2013, TuneIn listeners streamed more than one billion hours of music.

- Other online offerings licensed or developed by our membership include:
    - Jaman, SpiritClips, CanIStream.it, CinemaNow, Dish, HBOGO, PlayStation Store, StarzPlay, Fayvc, Xfinity, GoWatchIt, Guidebox, Epix, Xbox Video, Flixster, FanTV, MGo, AcornTV, Sony, DirecTV, Tv.com, Movies.com, Vudu, ToysRusMovies, TV Guide, HitBliss, LocateTV, Jinni, IMDb, Crackle, MaxGo, U-verse, TruTV, LiveWell Network, IndieFlix, Spike, FX, Fandor, FilmFresh, TVLand, RedBox Instant by Verizon, DisneyVideo,

PopcornFlix.com, Dramafever, Chegg, Bookish, CourseSmart, LexisNexis ebooks.

These examples illustrate that creative works are available to consumers on demand and in their preferred formats more widely than ever before, that options for audiences are only increasing, and that consumers are embracing legitimate offerings. Our members make creative works available online through all electronic devices, including apps on consoles and smart TVs; distribute their work –including movies and music – via social media platforms like Facebook and YouTube; and empower services like Hoopla to sublicense works for distribution to local libraries allowing library users to access creative works with their library card for free. They have also built their own services and platforms for distribution of creative works such as:

- *Warner Instant Archive:* Responding to consumer demand, Warner Bros. made archived content available online through its own streaming subscription service; Launched in early 2013.
- *Ultraviolet*: launched by a consortium of copyright owners, retailers, technology companies and distributors, the service gives consumers access to any film they purchase on any device, at anytime, in any place; via streaming or downloaded locally.
- *NBC Sports Live Extra*, allows free online live viewing of selected sports events in HD on multiple devices. The service includes several exclusive camera angles that viewers can switch between to enjoy sporting events in ways not possible even when viewing them live.
- *WolfeOnDemand.com:* a worldwide pay-per-view service that allows audiences around the globe to access and enjoy films distributed by Wolfe Video, an indie distributor. Fighting the cash rewards cyber-locker sites offer users supplying illegal content, Wolfe on Demand allows bloggers and forum operators to become "affiliates" and earn legitimate commissions on movies they "share" via WolfeOnDemand.

Our members have also partnered with innovative new services to enable users to engage and interact with their works in ways that have previously not been possible. For example:

- Members of the Copyright Alliance license lyrics and rich information such as artist biographies, album cover art, reviews, and pictures on over 4 million tracks and artists to music recognition services such as Shazam. Using this information, music lovers can discover, purchase and interact with music using the Shazam applications on their mobile phones. Shazam also enables users to manage their historical discoveries, access track charts, purchase follow-on products and share their musical findings with their friends.

- Similarly, The Echo Nest, a music intelligence company, has partnered with Getty Images to make high-quality photographs of recording artists available to customers using its Dynamic Music Data solution. "Tens of thousands of high-resolution, curated Getty images will be available from The Echo Nest, helping music sites and apps build image-rich, real-time music experiences that delight fans and increase engagement."[4]
- Movieclips.com is a service fully licensed by 20th Century Fox, MGM, Paramount, Sony Pictures, Universal Pictures and Warner Bros. The service offers over 12,000 film clips so that users can "search, find, view, discuss and share scenes from [their] favorite movies."[5]
- And Copyright Alliance members also support mobile music services like Muve from mobile phone company Cricket. Muve is a mobile music service, packaged with talk, text and web browsing services that allows unlimited downloads of music, and promotes sharing and music discovery via social networking with other muve users and DJ playlists.

New Funding and Monetization Models

Our members are also exploring new funding and monetization models – not just for their own work, but to enable the creation of derivative works by fans. They additionally are creating interactive experiences for their audiences in order to bring new excitement to enjoying works of creativity.

One of our grassroots members, indie filmmaker Jeff Grace, recently wrote to us about his plans to make cinema more like a live performance:

> "The death of DVD has turned the business upside down… However, digital has also made access to making movies easier than ever before. So as an emerging filmmaker, you have no excuse to not make your script. I'm now working on my third film (www.FOLKHEROandFUNNYGUY.com) and with this project we are trying to build a community that captures the connection and excitement people get from a live concert (it helps that our film is a story about music and stand-up comedy.) For one, we are using Kickstarter to help raise funds and build a community. We plan to invite fans of the film to be in the movie's live music and stand-up comedy scenes. When the film is released, we plan to have a live component that will make the theatrical screening more of a rare event and not just something you click on iTunes…. I'm not saying we have 100% figured this

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[4] *The Echo Nest Partners with Getty Images to Enhance Dynamic Music Data With Premium Artist Photos*, PR NEWSWIRE, http://www.prnewswire.com/news-releases/the-echo-nest-partners-with-getty-images-to-enhance-dynamic-music-data-with-premium-artist-photos-229708601.html (Last Visited Nov 18, 2013).

[5] Zach James & Rich Raddon, *Thanks for joining our beta!* Movieclips, http://movieclips.com/about/team / (Last Visited Nov 18th, 2013).

> out, but we are starting to look at ways to help our films break through the rapidly expanding clutter, build communities of loyal fans and create a business model that rewards our investors' commendable investment in the arts."

Other services and approaches used by our members include:

- *Vimeo On Demand* -- allows filmmakers to charge for access to videos. Demonstrating how the video marketplace is evolving on all levels, Vimeo recently began offering advances to filmmakers in exchange for temporary exclusive streaming rights to their works.
- *YouTube* -- in addition to its free videos, YouTube launched paid subscription channels in May, and currently offers over 50 channels with fees starting at $0.99/month.
- *Stageit* -- is a service that allows creators to broadcast live, interactive shows with monetization opportunities. Although the service is primarily geared toward musicians, as a video platform it has application to other types of works.

Our members are not only embracing services which allow them to monetize their own work, but are supporting services that allow fans to write and monetize works of fan fiction, and to remix and stream their music. For example:

- *Kindle Worlds*, launched by Amazon Publishing is the first commercial publishing service that allows authors of fan fiction to monetize their work. Numerous Copyright Alliance members have licensed their properties to this service in order to allow fans of their works to write, distribute and profit from the fan fiction they write. Worlds licensed include popular TV shows like *Gossip Girls, Vampire Diaries and Pretty Little Liars.*
- *Indiloop.com* is an online remix site currently in beta form. It offers licensed "stems" (compilations of audio inputs like vocals, bass, drum etc.) for remixing and sharing. The service is licensed by or in negotiations with various Copyright Alliance members who wish to make their works available to users through it.

Our members' involvement with innovative licensing models spans every sector of the creative world. Among the forward looking licensing options is Christian Copyright Licensing International (CCLI), which provides churches with simple, affordable solutions to copyright licensing issues. Among the various services offered by CCLI are licenses to facilitate choral performances and congregational singing (including transmission and display of musical performances), the use of commercial music in rehearsals, licenses to steam and podcast public performances of a church choir's singing, clip and movie licenses to use motion pictures in ministry-related activities and sermons, and on line resources for churches and ministries to find copyrighted works appropriate for use in worship.

In other instances, our members have devised new licensing approaches to incentivize services that rely on their works to work collaboratively with them. Like other copyright owners, Getty Images faces challenges in convincing online service providers whose platforms host unlicensed content to work collaboratively with them. Despite these challenges, Getty Images recently struck a deal with a major social media platform to provide metadata associated with its images to the platform. In exchange, Pinterest will provide attribution for the images and will pay a fee for the metadata, which means Getty photographers will receive credit and compensation. By leveraging its image-recognition technology and focusing on how Getty could add value to the Pinterest platform and its user experience, Getty was able to create an innovative, mutually beneficial partnership. Getty Images will continue to look for new business models that meet the needs of image users, provide compensation to photographers, and respect copyright.[6]

Investments in Developing Digital Distribution Models

Proving the Supreme Court's observation that copyright incentivizes dissemination, not just creation of creative and scholarly works, scholarly publishers have invested millions of dollars in recent years to digitize academic and scientific works and make them accessible online. For example:

- The publishing Industry invests $100s of millions in R&D, infrastructure, skilled labor, and other resources to create, publish, distribute and maintain scholarly articles digitally and on the Internet. Scholarly publisher Reed Elsevier began development of its on line publishing platform, ScienceDirect in 1995, beta tested it in 1997-1998, and finally rolled it out in 1999. The company invested $26 million in initial development costs and made an initial investment of $46 million to create digital archives. Since then it has spent $100s of millions shifting to digital production and publication of journals. This includes paying developers to code, scan, and beta test platforms, purchasing hardware and machinery, R&D and ongoing maintenance and enhancements. Currently, Reed Elsevier maintains over 90 terabytes of digital storage capacity from which an average of 10 million active users from 120 different countries download nearly 700 million articles per year. More than 1.5 million articles in science, technical and medical fields were published in 2009 alone.[7]

- Creative people within such innovative businesses are developing new tools for their readers as well. The New England Journal of Medicine employs a full time staff of medical illustrators to redraw and recompose all images submitted by authors. A recent feature pioneered by the journal is a 3D video animation of all of the medical images that allows the images to be rotated on multiple axes for different perspectives. The benefits to medical and biochemical researchers for their own innovative work are obvious.[8]

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[6] It is worth noting that some stakeholders resist and resent our members' investment in facilitating easy licensing of works. The Library Copyright Alliance has filed comments in the currently ongoing US Patent and Trademark Office's roundtable proceedings concerning the Department of Commerce Green Paper, *Copyright Policy, Creativity, and Innovation in the Digital Economy* in which they argue against the creation of licensing models to facilitate high volume- low value uses of copyrighted works on the grounds that such easy to access licenses could be used by rights holders to argue against expanding the doctrine of fair use. Response of the Library Copyright Alliance to the Request for Comments on Department of Commerce Green Paper, *Copyright Policy, Creativity, and Innovation in the Digital Economy*, Docket No. 130927852-3852-01, at 3.

[7] Adam Mossoff, *How Copyright Drives Innovation in Scholarly Publishing* (forthcoming 2013) (manuscript at 18-20) *available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2243264.*

- The newspaper industry has embraced the mobile ecosystem, and individual newspapers and news publishers have made digital content available through thousands of mobile apps (most free). Nearly 80 percent of research respondents in mid-2013 reported using a mobile app to consume media, and more than 55 percent of mobile users reported consuming news through mobile apps.[9]

These are but a few examples of the many ways in which Copyright Alliance members are engaging with and expanding digital delivery models. They demonstrate that copyright owners of all backgrounds work actively and creatively to ensure their work is easily accessible and can be enjoyed as widely as possible. Copyright is not an impediment to innovation and distribution -- it is rather the erosion of these rights that would harm consumers the most, by diminishing the abilities of creators to create and creative industries to invest in funding and disseminating their work.

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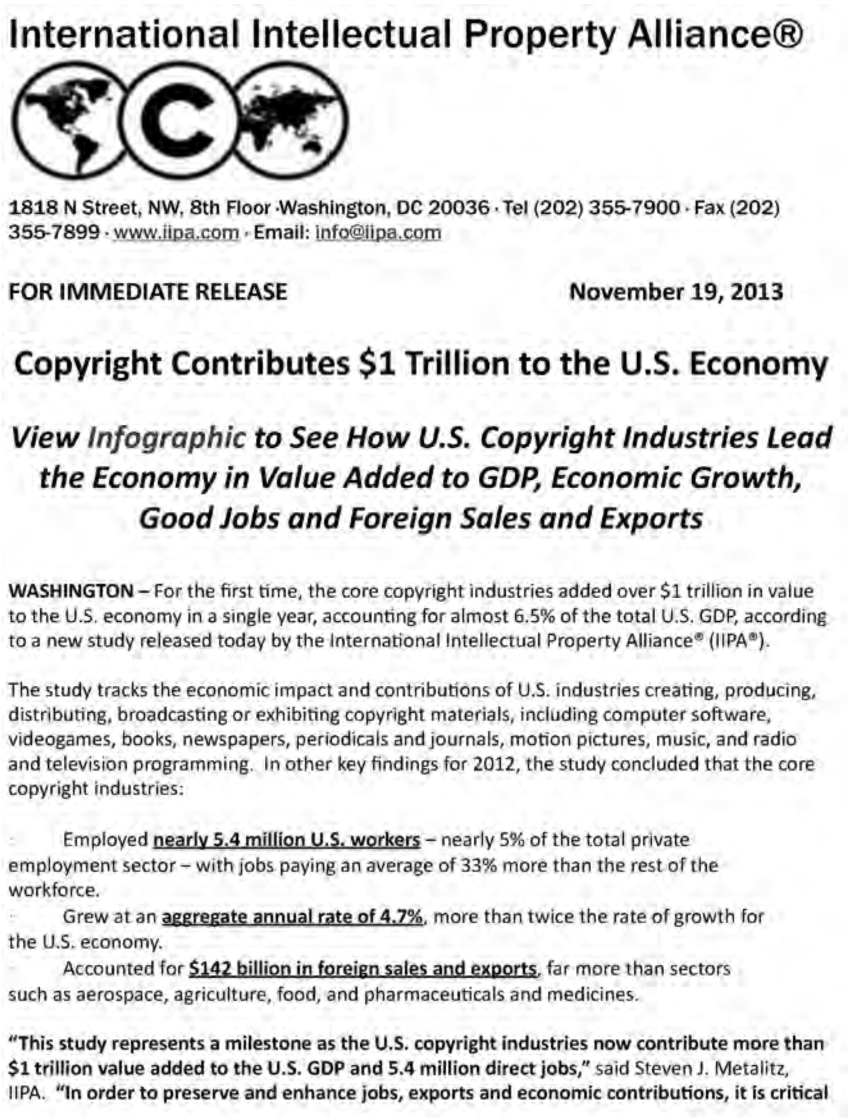
[8] *Id.*

[9] *See* Donald J. Reynolds Journalism Institute, *2013 Q1 Research Report 1: News Consumption on Mobile Media Surpassing Desktop Computers and Newspapers* (April 25, 2013), *available at* http://www.rjionline.org/research/rji-dpa-mobile-media-project/2013-q1-research-report-1.



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FOR IMMEDIATE RELEASE **November 19, 2013**

Copyright Contributes $1 Trillion to the U.S. Economy

View Infographic to See How U.S. Copyright Industries Lead the Economy in Value Added to GDP, Economic Growth, Good Jobs and Foreign Sales and Exports

WASHINGTON – For the first time, the core copyright industries added over $1 trillion in value to the U.S. economy in a single year, accounting for almost 6.5% of the total U.S. GDP, according to a new study released today by the International Intellectual Property Alliance® (IIPA®).

The study tracks the economic impact and contributions of U.S. industries creating, producing, distributing, broadcasting or exhibiting copyright materials, including computer software, videogames, books, newspapers, periodicals and journals, motion pictures, music, and radio and television programming. In other key findings for 2012, the study concluded that the core copyright industries:

- Employed **nearly 5.4 million U.S. workers** – nearly 5% of the total private employment sector – with jobs paying an average of 33% more than the rest of the workforce.
- Grew at an **aggregate annual rate of 4.7%**, more than twice the rate of growth for the U.S. economy.
- Accounted for **$142 billion in foreign sales and exports**, far more than sectors such as aerospace, agriculture, food, and pharmaceuticals and medicines.

"This study represents a milestone as the U.S. copyright industries now contribute more than $1 trillion value added to the U.S. GDP and 5.4 million direct jobs," said Steven J. Metalitz, IIPA. **"In order to preserve and enhance jobs, exports and economic contributions, it is critical**

that we have strong legal protections for U.S. creativity and innovation in the U.S. and abroad."

The study, *Copyright Industries in the U.S. Economy: The 2013 Report*, was prepared by Stephen E. Siwek of Economists Incorporated for the IIPA, and updates 13 previous studies. It is based on data from the Bureau of Economic Analysis and other government agencies and it demonstrates the vibrancy of copyright and creativity as an engine for growth for the U.S. economy.

In reaction to the study, Representative Judy Chu, co-chair of the Congressional Creative Rights Caucus, said: **"This study demonstrates that not only do U.S. copyright industries develop the creative works that inspire and entertain so many, they also provide high paying jobs and spur economic activity, consistently contributing to a trade surplus and adding substantial value to our GDP. This is why we must preserve and protect the works of our creative industry, so they can continue to drive economic growth and innovation with a uniquely American product."**
Matt Loeb, International President of the International Alliance of Theatrical Stage Employees, Moving Picture Technicians, Artists and Allied Crafts (IATSE), said: **"This report makes it crystal clear that workers in the creative industries make a huge contribution to America's economy. It also underscores the urgent need to do more to build, strengthen and protect employment in this dynamic part of our nation's economy."**
Metalitz added: "**To foster continued growth of this dynamic sector, we need strong and modern copyright laws that take into account changes in technology and the continuing harm caused by copyright piracy, especially as legitimate digital distributors continue to emerge. Vigorous enforcement of those laws is also critical to ongoing efforts to create and preserve good U.S. jobs, reduce persistent trade deficits, and foster durable economic growth."**

The full report and more materials can be found at http://www.iipa.com/copyright_us_economy.html.

THE REPORT'S KEY FINDINGS:

Copyright Industries Contribute Significantly to U.S. Gross Domestic Product (GDP)

- In 2012, the value added by the core copyright industries to U.S. GDP **exceeded $1 trillion dollars** for the first time, accounting for nearly **6.5% of the U.S. economy**.
- The value added by the total copyright industries to GDP **exceeded $1.7 trillion dollars** accounting for **11.25% of the U.S. economy**. (Total copyright industries include those which are "partial copyright," "non-dedicated support," and "interdependent industries.")

Copyright Industries Employ Millions of Workers in Good Paying Jobs

- The core copyright industries employed **nearly 5.4 million workers** in 2012, accounting for **4% of the entire U.S. workforce**, and **4.8% of total private employment** in the U.S.
- The annual 2012 compensation paid to core copyright workers – **$85,644** – far exceeds the average annual compensation paid to all U.S. workers – $64,594 – amounting to a **33% "compensation premium"** over the average U.S. annual wage.

- The total copyright industries employed more than 11.1 million workers in 2012, accounting for 8.35% of all U.S. employment, or 10% (9.99%) of all private employment in the United States. The average annual compensation paid to employees of the total copyright industries in 2012, $75,926, exceeds the U.S. average annual wage by 18%.

Copyright Industries' Real Growth Rates Outpace the Rest of the U.S. Economy

- During the period 2009-2012, the core copyright industries **grew at an aggregate annual rate of 4.7%**, **more than twice as much as the entire U.S. economy**. The average annual growth rate of the entire U.S. economy over the same period was only 2.1%.
- During the same period, the total copyright industries grew at an annual rate of 4.99%.

Copyright Industries Contribute Significantly to Foreign Sales and Exports, Outperforming Many Major U.S. Industry Sectors

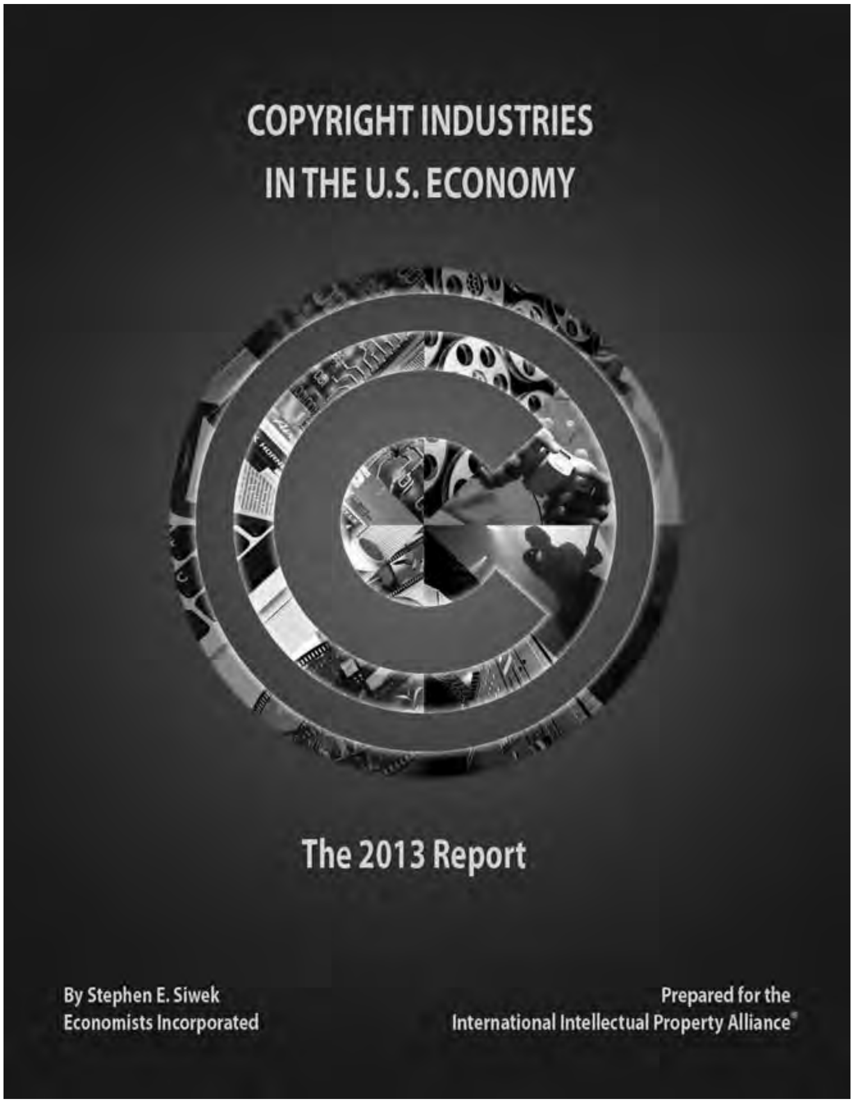
- Sales of select U.S. copyright sectors in overseas markets amounted to **$142 billion in 2012**, a significant increase over previous years.
- As a comparison, the foreign sales of select copyright industry sectors **exceed foreign sales of other major U.S. industries**, including aerospace exports ($106 billion), U.S. agricultural exports ($70.1 billion), food ($64.7 billion) and pharmaceuticals and medicines ($50.9 billion).

For more information, contact:
Steven Metalitz, Michael Schlesinger, Eric Schwartz, Amanda Wilson Denton 202-355-7900

About the IIPA: The IIPA is a private sector coalition, formed in 1984, of trade associations representing U.S. copyright-based industries working to improve international protection and enforcement of copyrighted materials and open foreign markets closed by piracy and other market access barriers. IIPA's seven member associations represent over 3,200 U.S. companies producing and distributing materials protected by copyright laws throughout the world—all types of computer software, including operating systems, systems software such as databases and security packages, business applications, and consumer applications such as games, personal finance, and reference software, free software, open source software, and software as a service, entertainment software including interactive games for videogame consoles, handheld devices, personal computers and the Internet, and educational software; motion pictures, television programming, DVDs and home video and digital representations of audiovisual works; music, records, CDs, and audiocassettes; and fiction and non-fiction books, education instructional and assessment materials, and professional and scholarly journals, databases and software in all formats. Members of the IIPA include Association of American Publishers, BSA | The Software Alliance, Entertainment Software Association, Independent Film & Television Alliance, Motion Picture Association of America, National Music Publishers' Association, and Recording Industry Association of America.

The "total" copyright industries include not only the core copyright but also the partial copyright, non-dedicated support, and interdependent industries. "Partial" copyright industries are industries in which only some aspect or portion of the products that they create they can quality for copyright protection. These industries range from fabric to jewelry to furniture to toys and games. "Non-dedicated support" industries include industries that distribute both copyright and non-copyright protected materials to business and consumers. Examples here include transportation services, telecommunications and wholesale and retail trade. As in past studies, only a portion of the total value added by these industries is considered to be part of the copyright industries. "Interdependent" industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers and retailers of TV sets, personal computers, and other devices, and usage dependent products including blank recording material, and certain categories of paper.

ATTACHMENT



COPYRIGHT INDUSTRIES IN THE U.S. ECONOMY

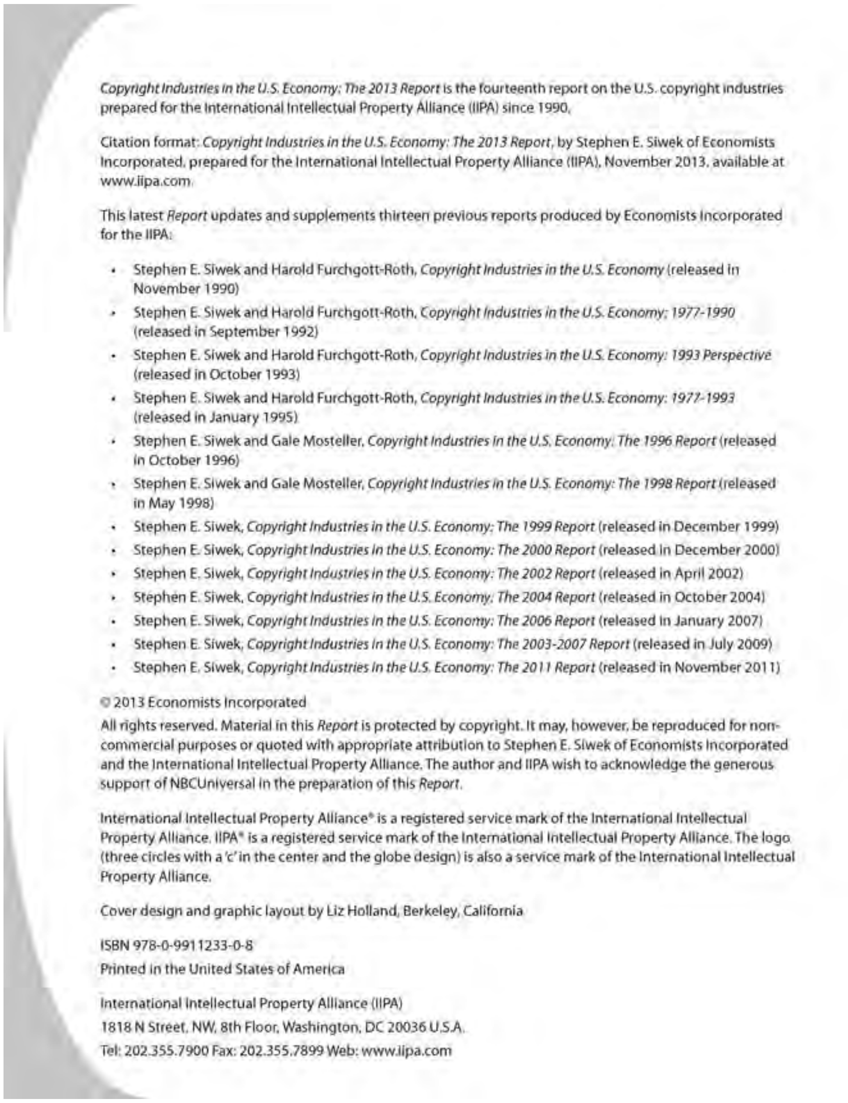
The 2013 Report

By Stephen E. Siwek
Economists Incorporated

Prepared for the
International Intellectual Property Alliance®

COPYRIGHT INDUSTRIES IN THE U.S. ECONOMY

The 2013 Report



Copyright Industries in the U.S. Economy: The 2013 Report is the fourteenth report on the U.S. copyright industries prepared for the International Intellectual Property Alliance (IIPA) since 1990.

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- Stephen E. Siwek and Harold Furchgott-Roth, *Copyright Industries in the U.S. Economy* (released in November 1990)
- Stephen E. Siwek and Harold Furchgott-Roth, *Copyright Industries in the U.S. Economy: 1977-1990* (released in September 1992)
- Stephen E. Siwek and Harold Furchgott-Roth, *Copyright Industries in the U.S. Economy: 1993 Perspective* (released in October 1993)
- Stephen E. Siwek and Harold Furchgott-Roth, *Copyright Industries in the U.S. Economy: 1977-1993* (released in January 1995)
- Stephen E. Siwek and Gale Mosteller, *Copyright Industries in the U.S. Economy: The 1996 Report* (released in October 1996)
- Stephen E. Siwek and Gale Mosteller, *Copyright Industries in the U.S. Economy: The 1998 Report* (released in May 1998)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 1999 Report* (released in December 1999)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2000 Report* (released in December 2000)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2002 Report* (released in April 2002)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2004 Report* (released in October 2004)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2006 Report* (released in January 2007)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2003-2007 Report* (released in July 2009)
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2011 Report* (released in November 2011)

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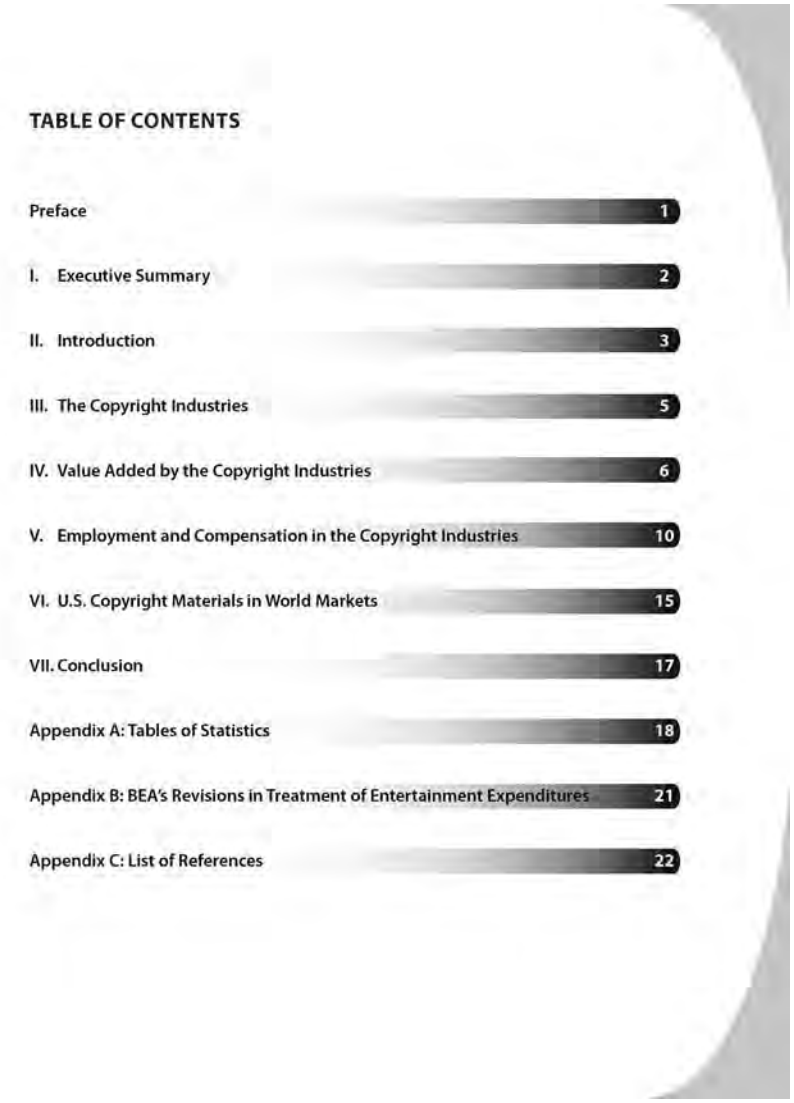

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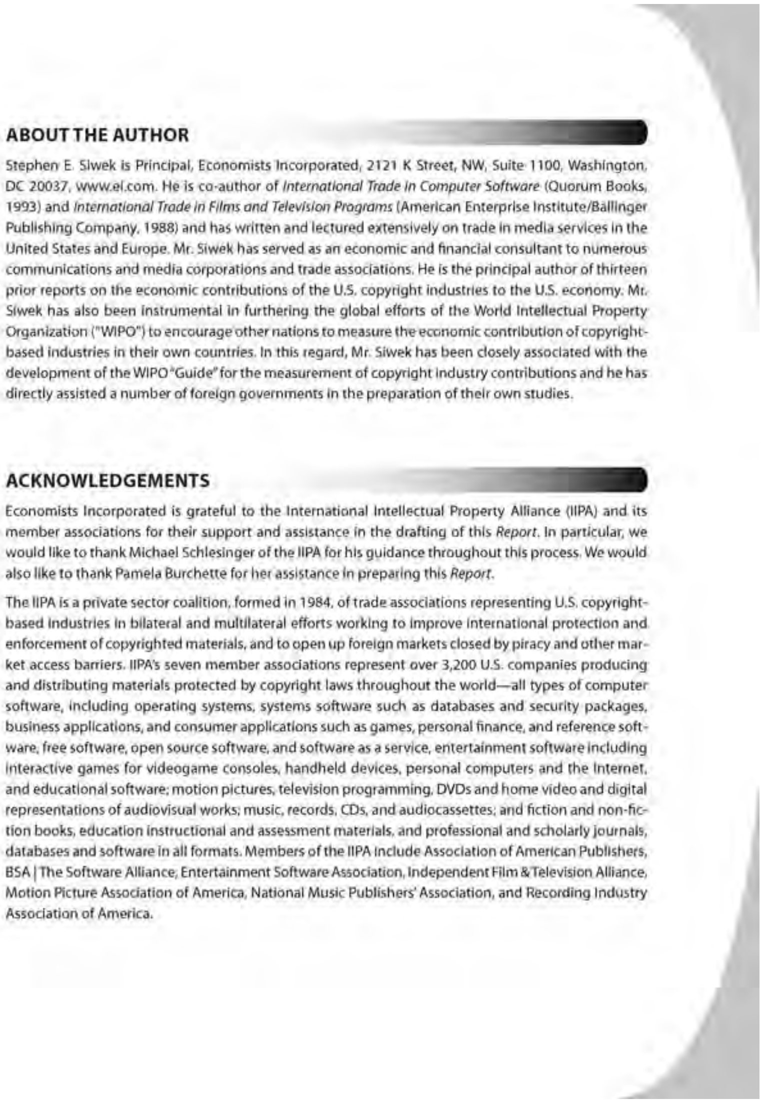

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The IIPA is a private sector coalition, formed in 1984, of trade associations representing U.S. copyright-based industries in bilateral and multilateral efforts working to improve international protection and enforcement of copyrighted materials, and to open up foreign markets closed by piracy and other market access barriers. IIPA's seven member associations represent over 3,200 U.S. companies producing and distributing materials protected by copyright laws throughout the world—all types of computer software, including operating systems, systems software such as databases and security packages, business applications, and consumer applications such as games, personal finance, and reference software, free software, open source software, and software as a service, entertainment software including interactive games for videogame consoles, handheld devices, personal computers and the Internet, and educational software; motion pictures, television programming, DVDs and home video and digital representations of audiovisual works; music, records, CDs, and audiocassettes; and fiction and non-fiction books, education instructional and assessment materials, and professional and scholarly journals, databases and software in all formats. Members of the IIPA include Association of American Publishers, BSA | The Software Alliance, Entertainment Software Association, Independent Film & Television Alliance, Motion Picture Association of America, National Music Publishers' Association, and Recording Industry Association of America.

PREFACE

Since 1984, IIPA and its association members, representing industries reliant on copyright – producers and distributors of software, movies, music, videogames, and books and journals for the world – have worked in partnership with the U.S. government to improve the ability of the copyright industries to do business in foreign markets. These efforts have resulted in significant improvements in copyright laws and enforcement around the world and in the lowering of market access barriers and addressing other policies that hinder these industries' ability to compete on a level playing field in global markets. These improvements in turn have had a substantial positive impact over the years on how these industries contribute to value added to the U.S. economy; to employment and wages; and to foreign sales and exports, thereby benefiting countless millions of individuals and enterprises in the United States.

To quantify the contribution of the copyright industries, IIPA commenced a series of economic studies in 1990. *Copyright Industries in the U.S. Economy: The 2013 Report*, the fourteenth such report, by Stephen E. Siwek of Economists Incorporated, covers the period 2009-2012. This *Report* shows that the copyright industries make up an increasingly large percentage of value added to GDP; create more and better-paying jobs; grow faster than the rest of the U.S. economy; and contribute substantially to U.S. foreign sales and exports, outpacing many industry sectors. The specific findings of this year's *Report* mark a milestone: for the first time, the contribution of the core copyright industries of the U.S. economy surpassed one trillion dollars in 2012.[1]

As international trade has increased and globalized, foreign governments and international IP organizations such as the World Intellectual Property Organization (WIPO) have become acutely aware of the significance of copyright industries to national economies, and the linkage to their economic growth, technological innovation, and cultural diversity. In 2003, WIPO took a critical step forward in issuing a *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*. The *Guide*, developed by an experts' group which included the author of this *Report*, Stephen E. Siwek, describes methodologies for measuring the role of copyright industries in domestic economies that have now been adopted in well over 40 countries' national reports, with more in the pipeline.[2] These national studies provide the economic underpinnings for efforts to reform copyright law and enforcement and to lower rates of copyright piracy.

Despite the robust achievements of the copyright industries during the period covered in this *Report*, significant challenges remain. As the copyright industries derive a growing percentage of their revenue from sales outside the United States, global online and physical copyright piracy, as well as market access and other stifling discriminatory barriers to doing business in various countries, inhibit the growth of the copyright industries in the U.S. and globally. Economic reports such as this one underscore what is at stake. They provide a compelling argument for more effective legal, enforcement, and market access regimes to promote and foster the growth of the copyright industries in the U.S. and in countries around the world.

– Michael Schlesinger and Steven J. Metalitz,
International Intellectual Property Alliance

I. EXECUTIVE SUMMARY

This report, *Copyright Industries in the U.S. Economy: The 2013 Report*, demonstrates that the core copyright industries of the United States – those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials, and which include computer software, videogames, books, newspapers, periodicals and journals, motion pictures, recorded music, and radio and television broadcasting – provide significant value added to GDP; an increasing number of high-paying jobs; real growth which outpaces the rest of the economy; and substantial foreign sales and exports, surpassing many industry sectors.

Copyright Industries Contribute Significantly to U.S. Gross Domestic Product (GDP)

- In 2012, the value added by the core copyright industries to U.S. GDP exceeded $1 trillion dollars ($1,015.6 billion) for the first time, accounting for 6.48% of the U.S. economy.
- In 2012, the value added by the total copyright industries[1] to GDP exceeded $1.7 trillion ($1,765 billion), accounting for 11.25% of the U.S. economy.

Copyright Industries Employ Millions of Workers Who Earn a "Compensation Premium"

- The core copyright industries employed nearly 5.4 million workers in 2012, accounting for 4.04% of the entire U.S. workforce, and 4.83% of total private employment in the U.S.
- The annual 2012 compensation paid to core copyright workers – $85,644 – far exceeds the average annual compensation paid to all U.S. workers – $64,594 – amounting to a 33% "compensation premium" over the average U.S. annual wage.
- The total copyright industries employed more than 11.1 million workers in 2012, accounting for 8.35% of all U.S. employment, or 10% (9.99%) of all private employment in the United States. The average annual compensation paid to employees of the total copyright industries in 2012, $75,926, exceeds the U.S. average annual wage by 18%.

Copyright Industries' Real Growth Rates Outpace the Rest of the U.S. Economy

- During the period 2009-2012, the core copyright industries grew at an aggregate annual rate of 4.73%. The average annual growth rate of the entire U.S. economy over the same period was only 2.14%, less than half as much.
- During the same period, the total copyright industries grew at an annual rate of 4.99%.

Copyright Industries Contribute Significantly to Foreign Sales and Exports, Outperforming Many Major U.S. Industry Sectors

- Sales of select U.S. copyright sectors in overseas markets amounted to $142 billion in 2012, a significant increase over previous years.
- As a comparison, the foreign sales of select copyright industry sectors exceed foreign sales of other major U.S. industries, including aerospace exports ($106 billion), U.S. agricultural exports ($70.1 billion), food ($64.7 billion) and pharmaceuticals and medicines ($50.9 billion).

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[1] The "total" copyright industries include not only the core copyright but also the partial copyright, non-dedicated support, and interdependent industries. "Partial" copyright industries are industries in which only some aspect or portion of the products that they create they can qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games. "Non-dedicated support" industries include industries that distribute both copyright and non copyright protected materials to business and consumers. Examples here include transportation services, telecommunications and wholesale and retail trade. As in past studies, only a portion of the total value added by these industries is considered to be part of the copyright industries. "Interdependent" industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers and retailers of TV sets, personal computers, and other devices, and usage dependent products including blank recording material, and certain categories of paper.

II. INTRODUCTION

Copyright Industries in the U.S. Economy: The 2013 Report is the fourteenth in a series issued over the last 23 years by Economists Incorporated, updating and supplementing thirteen prior reports prepared on behalf of the IIPA. This latest *Report* presents data on the value added contributions of the copyright sector to the U.S. economy; the percentage contribution of the copyright sector to the overall U.S. economy; the relative growth of the creative industries compared with the remainder of the economy; employment levels in the creative sector; the average compensation for workers in the copyright sector in comparison to other sectors; and the contributions of selected copyright industries to exports and foreign sales. The *Report* confirms once again that the U.S. copyright industries contribute significantly to U.S. GDP. The creative industries continue to outpace the rest of the economy in real growth. The copyright industries also continue to employ millions of workers whose average compensation levels substantially exceed the average level of compensation paid to all U.S. workers. The core copyright industries of the U.S. continued to grow in terms of foreign sales and exports during 2009-2012, outperforming many key industrial sectors.

As in previous years, this study is presented in five sections:

- The copyright industries
- Value added by the copyright industries to the U.S. economy
- Employment and compensation in the copyright industries in the U.S. economy
- U.S. copyright materials in the world market
- Conclusion

This *Report* presents estimates of the copyright industries' contributions to the U.S. economy for the years 2009-2012.[8] The underlying data used in this *Report* are current through 2012. The period covered by this *Report* was one of generally improving economic conditions in the U.S. as a whole. In 2010, the American economy began to emerge from the painful recession of 2008-2009. Subsequently, the economy expanded in 2011 and grew even more vigorously in 2012. This *Report* clearly documents the end of negative growth in value added and in employment for the copyright industries and for the U.S. economy as a whole.

This study continues to reflect the use of industry data classifications adopted under the North American Industry Classification System ("NAICS") which has been widely implemented by U.S. statistical agencies. It also continues to follow the international standards and recommendations propounded by WIPO in 2003 regarding the development of economic and statistical standards to measure the impact of domestic copyright industries on domestic economies.[5]

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[8] In this study, the values presented for 2009 have been updated from the 2009 results presented in *Copyright Industries in the U.S. Economy: The 2011 Report*. The updates result from data revisions published by the U.S. Bureau of Economic Analysis and by other government agencies since the last report was completed.

In July 2013, the U.S. Bureau of Economic Analysis ("BEA") announced changes in how it accounts for the costs of producing "artistic originals" in the determination of U.S. GDP, classifying them as an investment as opposed to current expenditures. Artistic originals include "books, movies, TV shows, music, photographs and greeting cards…" At this writing, BEA has not yet made use of the methodology described above to produce revised estimates of annual GDP by industry. Indications are that applying its methodology looking at the economic benefit of the "costs" of production would result in increases in the contribution of industries associated with "artistic originals."[6] However, given the lack of revised data to date, the U.S. copyright industry results presented in this *Report* do not reflect the possible effect of the BEA capitalization procedures.

The data in this study quantify the size and critical importance of the copyright industries to the U.S. economy, generally using the most current data available. As in past studies, the U.S. copyright industries' contribution to the U.S. economy is measured by three economic indicators: value added to the U.S. GDP in current dollars; industry employment and share of national employment; and revenues generated from foreign sales and exports. Further, this study includes two additional indicators of the importance of the copyright industries to the U.S. economy: compensation per employee, and real annual growth. As set forth below, during the period 2009-2012, the copyright industries, both core and total, achieved real growth rates in excess of 4.5% per year. By contrast, during the period considered in the *Copyright Industries in the U.S. Economy: The 2011 Report* (2007-2010), the copyright industries produced real growth rates of less than 1.5% annually.

Of course, the copyright industries were not the only beneficiaries of the improving economic climate after 2009. For example, during the years 2009-2012, real GDP for the U.S. as a whole increased at an annual rate of 2.14%. This growth rate significantly exceeded the annual growth figures reported in the 2011 study for the U.S. as a whole. U.S. real annual growth over that period (2007-2010) was only 0.05%. As this study documents, the U.S. copyright industries continue to make a disproportionately positive contribution to real growth in U.S. GDP.

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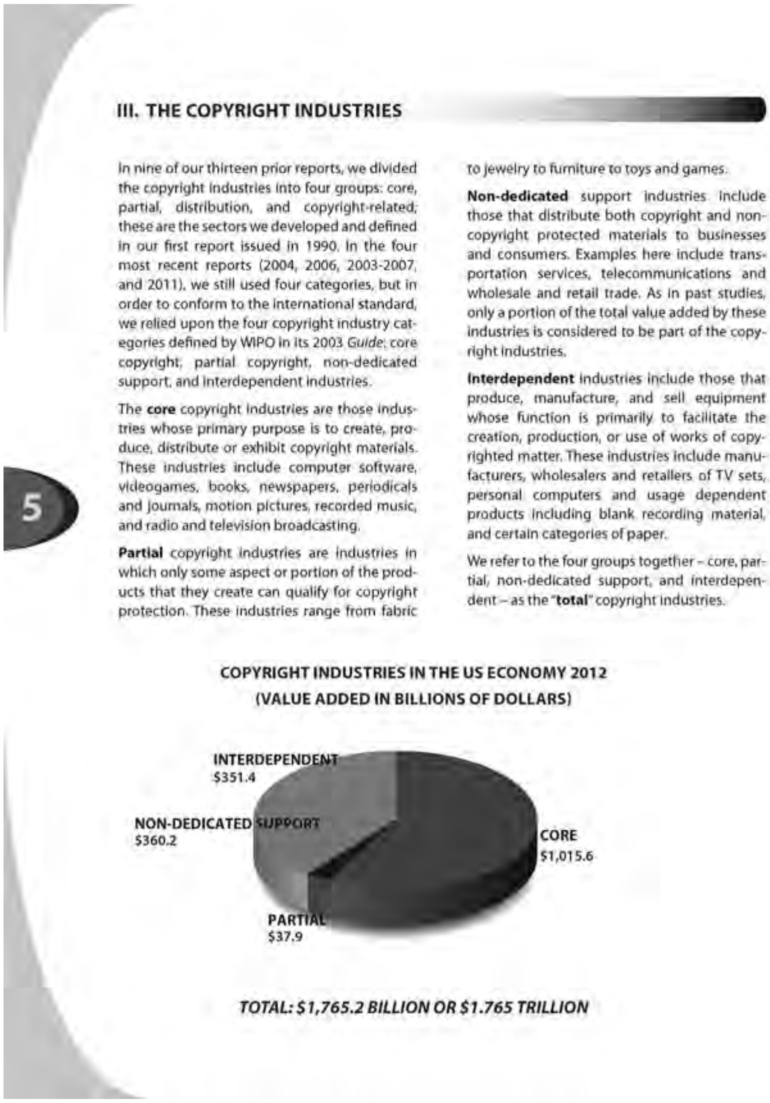
[5] The author of this Report, Stephen E. Siwek, participated as an expert at the meeting of the "Working Group of Experts on the Preparation of a WIPO Handbook on Survey Guidelines for Assessing the Economic Impact of Copyright and Related Rights" which was co-sponsored by WIPO and held in Helsinki, Finland, in July 2002. That meeting launched the process which resulted in WIPO's 2003 publication of its *Guide on Surveying the Economic Contribution of the Copyright-Based Industries* which embodies many of the recommendations and standards used in this Report.

[6] BEA is expected to publish revised estimates of annual value added by industry in December 2013.



III. THE COPYRIGHT INDUSTRIES

In nine of our thirteen prior reports, we divided the copyright industries into four groups: core, partial, distribution, and copyright-related; these are the sectors we developed and defined in our first report issued in 1990. In the four most recent reports (2004, 2006, 2003-2007, and 2011), we still used four categories, but in order to conform to the international standard, we relied upon the four copyright industry categories defined by WIPO in its 2003 *Guide*: core copyright, partial copyright, non-dedicated support, and interdependent industries.

The **core** copyright industries are those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials. These industries include computer software, videogames, books, newspapers, periodicals and journals, motion pictures, recorded music, and radio and television broadcasting.

Partial copyright industries are industries in which only some aspect or portion of the products that they create can qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games.

Non-dedicated support industries include those that distribute both copyright and non-copyright protected materials to businesses and consumers. Examples here include transportation services, telecommunications and wholesale and retail trade. As in past studies, only a portion of the total value added by these industries is considered to be part of the copyright industries.

Interdependent industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers and retailers of TV sets, personal computers and usage dependent products including blank recording material, and certain categories of paper.

We refer to the four groups together – core, partial, non-dedicated support, and interdependent – as the "**total**" copyright industries.

COPYRIGHT INDUSTRIES IN THE US ECONOMY 2012
(VALUE ADDED IN BILLIONS OF DOLLARS)

TOTAL: $1,765.2 BILLION OR $1.765 TRILLION

IV. VALUE ADDED BY THE COPYRIGHT INDUSTRIES

The most appropriate way to measure an industry's contribution to the national economy is to measure the industry's value added. Value added reflects the economic contribution of labor and capital of a particular industry. The sum of the value added of all industries in the United States is equal to gross domestic product (GDP), a standard measure of the size of the U.S. economy. For this reason, value added calculations can be used to draw comparisons of the relative size and growth rates of different industries in a way that is consistent with the federal government's national income and product accounting data.

The value added estimates for the copyright industries that are contained in this *Report* reflect underlying data obtained from the BEA, the U.S. Census Bureau and other government statistical agencies. In particular, the estimates of copyright industry value added make direct use of the industry-specific estimates of U.S. value added that are regularly published by the BEA. These industry-specific estimates (in both current dollar and real terms) are used as starting points to derive the contributions made by the core and total copyright industries to U.S. GDP.[7]

As noted above, the harmful effects of the recession of 2008-2009 were much diminished by 2010 and most U.S. industries experienced increasing sales and profits during those years. Nevertheless, the copyright industries remained a particularly important contributor to U.S. GDP. As shown in Table 1, the current dollar value added to U.S. GDP by the core copyright industries reached over $1 trillion ($1,015.6 billion) in 2012. In the same year, U.S. GDP reached $15.68 trillion. Thus, in 2012, the core copyright industries constituted a 6.48% share of nominal U.S. GDP. The value added by the total copyright industries in the same period is also shown in Table 1, which reports the value added to U.S. GDP by the total copyright industries in 2012 was $1.765 trillion, or 11.25% of U.S. GDP.

2009-2012 VALUE ADDED (BILLIONS OF US DOLLARS)

TABLE 1:

	2009	2010	2011	2012
Core Copyright Industries	$884.8	$910.4	$965.1	$1,015.6
Total US GDP	$13,973.7	$14,498.9	$15,075.7	$15,684.8
Core Share of US GDP	6.33%	6.28%	6.40%	6.48%
	2009	**2010**	**2011**	**2012**
Total Copyright Industries	$1,541.6	$1,596.2	$1,681.9	$1,765.2
Total US GDP	$13,973.7	$14,498.9	$15,075.7	$15,684.8
Total Share of US GDP	11.03%	11.01%	11.16%	11.25%

The current dollar estimates of the value added for the core copyright industries in 2009, 2010, 2011 and 2012, also expressed below in Chart 1, show an increase from $884.81 billion in 2009 to $1,015.64 billion, or more than $1 trillion, in 2012. The estimated value added for the other (non-core) copyright industries rose from $656.82 billion in 2009 to $749.53 billion in 2012.

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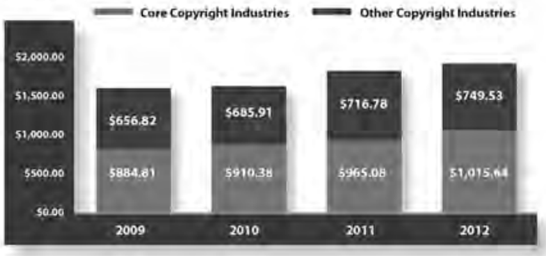
[7] See Section II and Appendix B for a discussion of recent changes announced in compilation of certain sectors by BEA.

COPYRIGHT INDUSTRIES VALUE ADDED
(IN BILLIONS OF CURRENT DOLLARS)

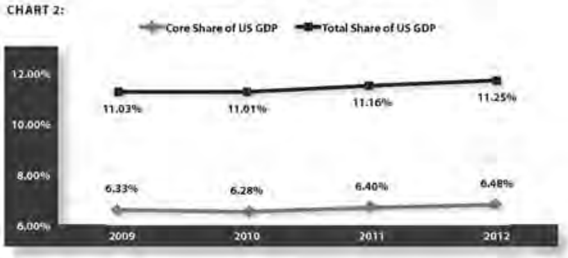
CHART 1:



The copyright industries' current dollar share of the U.S. economy is also expressed in Chart 2. On the basis of the methodology described above, we now estimate that the core copyright industries' current dollar share of the U.S. economy has increased from approximately 6.3% to nearly 6.5% of the U.S. economy over the years 2009 through 2012. The core copyright industries' current dollar share of the U.S. economy reached 6.48% in 2012. During that same period, the total copyright industries current dollar share of U.S. GDP reached 11.25% in 2012.

COPYRIGHT INDUSTRIES SHARE
OF CURRENT DOLLAR GDP

CHART 2:



To put these figures in perspective, it is useful to compare the economic contributions of the U.S. copyright industries to the contributions made by other U.S. industries in the same time period. Inter-industry comparisons to the U.S. copyright industry are shown in Table 2.

Table 2 reports the total value added to the U.S. economy by the entire federal government in 2012 was $668.3 billion.[8] This amount is substantially lower than the value added by the total copyright industries in the same year. In 2012, the total value added to the U.S. economy by state and local governments was $1,357.9 billion. This value is approximately 23% lower than the value added by the total copyright industries in 2012. Comparisons of the copyright industry's value added in 2011 and 2012, to other sectors of the U.S. economy are also provided in Table 2. These comparisons clearly document the size and importance of the copyright industries today.

2011 AND 2012 VALUE ADDED COMPARISONS TO OTHER SECTORS (BILLIONS OF US DOLLARS)

TABLE 2:

	2011	2012
Core Copyright - Value Added	$965.1	$1,015.6
Total Copyright - Value Added	$1,681.9	$1,765.2
Federal Government - Value Added	$658.1	$668.3
State and Local Government - Value Added	$1,335.8	$1,357.9
Construction - Value Added	$529.5	$558.7
Health Care and Social Assistance - Value Added	$1,136.9	$1,164.8
Finance and Insurance - Value Added	$1,159.3	$1,242.3

Since BEA calculates both current dollar and constant dollar value added for the industry classifications that it analyzes, we can estimate real growth rates of the copyright industries. In this *Report*, the constant dollar value added figures are used to derive estimates of the real growth rates achieved by the core and total copyright industries on a year by year basis. These data are also used to measure the contribution made by the copyright industries to the real annual growth achieved by the U.S. economy as a whole.

Real growth rates in value added experienced by the U.S. copyright industries and by the U.S. economy during the period 2009-2012 are provided in Table 3.[9] For each of the periods 2009-2010, 2010-2011, and 2011-2012, the U.S. core copyright industries experienced positive real growth in excess of 3.9% annually. Over the entire period 2009-2012, the core copyright industries grew at a real annual growth rate of 4.73%.

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[8] U.S. GDP figures from [illegible], A., Lindberg, B., and Morgan, E., *Annual Industry Accounts – Advanced Statistics on GDP by Industry*, Survey of Current Business, May 2013, Table 7. (Preliminary – U.S. BEA Annual Industry Accounts).

[9] Real growth rates measure changes in constant dollar value added over time. To derive estimates, current dollar value added figures are converted to "chained" dollars for the year 2005.

The total copyright industries experienced a comparable pattern of real growth during the years 2009-2012. As shown in Table 3, in 2009-2010, 2010-2011, and 2011-2012, the total copyright industries grew at annual rates in excess of 4.3% per year. For the full period 2009-2012, the real value added by the total copyright industries grew at a rate of 4.99% per year.

Both the U.S. copyright industries and the U.S. economy experienced positive real annual growth during the years 2010 through 2012. In order to provide a basis of comparison, the growth patterns for the U.S. economy are also provided in Table 3.

For the period 2009-2012, the U.S. economy grew at an annual rate of 2.14%. For the individual years 2009-2010, 2010-2011, and 2011-2012, the U.S. economy increased at annual rates of 2.39%, 1.81% and 2.21% respectively. As these figures make clear, for this period, the compound annual growth rate achieved by the U.S. copyright industries significantly exceeded the compound annual growth rate achieved by the U.S. economy as a whole. Overall, these industry sectors grew more than twice as fast as the economy as a whole during the period 2009 to 2012.

REAL ANNUAL GROWTH RATES VALUE ADDED TO US GDP

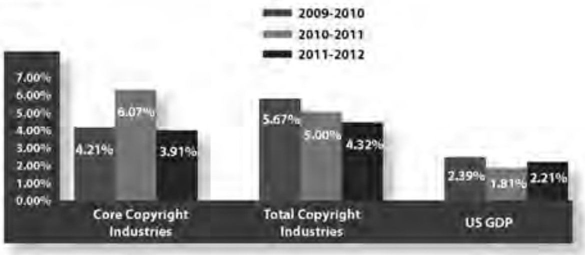
TABLE 3:

	2009-2010	2010-2011	2011-2012	*Annual Growth Rate* 2009-2012
Core Copyright Industries	4.21%	6.07%	3.91%	**4.73%**
Total Copyright Industries	5.67%	5.00%	4.32%	**4.99%**
US GDP	2.39%	1.81%	2.21%	**2.14%**

The real (constant dollar) annual growth rates experienced by the copyright industries during the periods 2009-2010, 2010-2011, and 2011-2012 are also expressed in Chart 3. As shown in Chart 3, the core copyright industries grew in excess of 3.9% in 2009-2010, 2010-2011, and 2011-2012, with a peak growth rate of 6.07% in 2010-2011. Similarly, as shown in the Chart, the total copyright industries grew sizably, in excess of 4.3% in 2009-2010, 2010-2011, and 2011-2012, with a peak growth rate of 5.67% in 2009-2010. By contrast, as noted, the real growth rates achieved by the U.S. economy as a whole were 2.39% in 2009-2010, 1.81% in 2010-2011, and 2.21% in 2011-2012. As Chart 3 demonstrates graphically, since 2009 the core and the total copyright industries have grown substantially faster than the real annual rate of growth experienced for the U.S. GDP as a whole.

REAL ANNUAL GROWTH RATES
COPYRIGHT INDUSTRIES AND US GDP

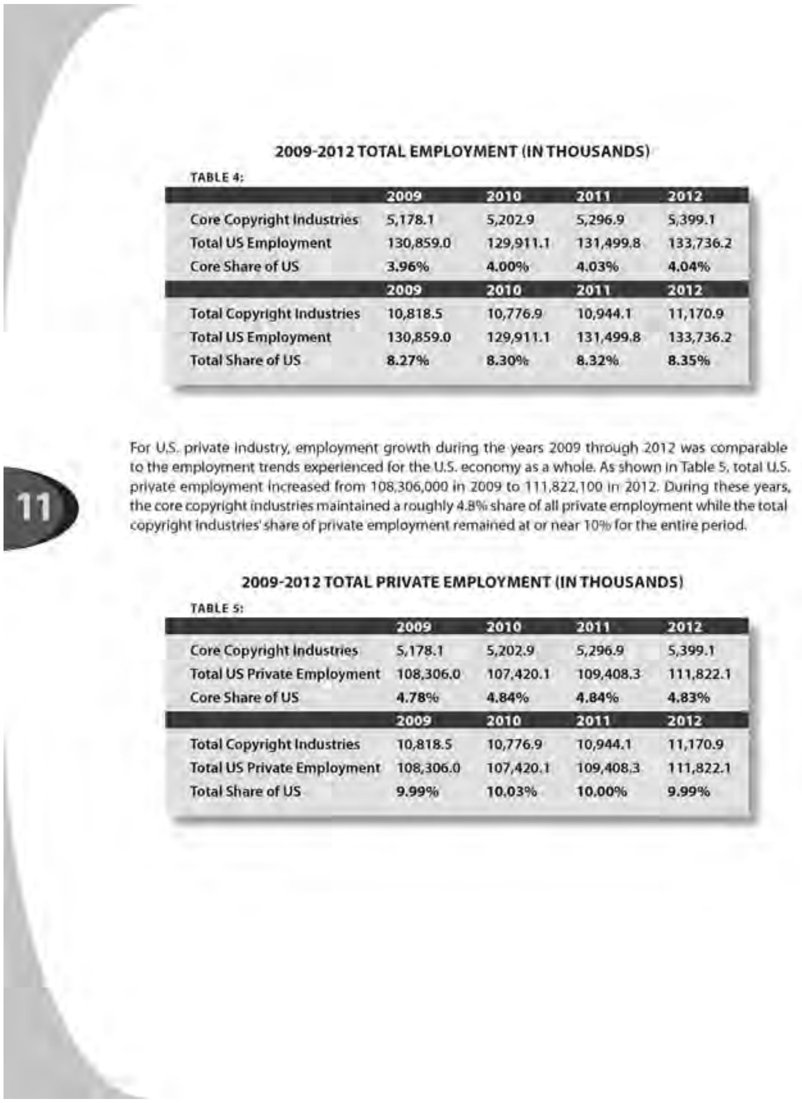
CHART 3:



V. EMPLOYMENT AND COMPENSATION IN THE COPYRIGHT INDUSTRIES

In this *Report*, we estimate the number of workers employed in the core and total copyright industries for the years 2009-2012. The procedures used to derive our estimates of employment were largely based on the formulas derived in prior reports. In those reports, employee counts were derived to be consistent in both the NAICS and ISIC classification systems. As in the past, the actual employee counts by NAICS code were extracted from the Bureau of Labor Statistics ("BLS") database.

Employment figures for the core and total copyright industries for the years 2009, 2010, 2011, and 2012 are provided in Table 4. As shown in Table 4, the core copyright industries employed 5,178,100 workers in 2009, representing 3.96% of the total U.S. workforce. By 2012, the number of core copyright employees in the United States had increased by 221,000 workers to 5,399,100. These workers represented 4.04% of the total U.S. workforce in 2012. In 2009, the total copyright industries employed more than 10.8 million workers. By 2012, employment in the total copyright industries had increased to more than 11.17 million. During the same period, total U.S. employment increased from 130,859,000 in 2009 to 133,736,200 in 2012.



2009-2012 TOTAL EMPLOYMENT (IN THOUSANDS)

TABLE 4:

	2009	2010	2011	2012
Core Copyright Industries	5,178.1	5,202.9	5,296.9	5,399.1
Total US Employment	130,859.0	129,911.1	131,499.8	133,736.2
Core Share of US	**3.96%**	**4.00%**	**4.03%**	**4.04%**
	2009	**2010**	**2011**	**2012**
Total Copyright Industries	10,818.5	10,776.9	10,944.1	11,170.9
Total US Employment	130,859.0	129,911.1	131,499.8	133,736.2
Total Share of US	**8.27%**	**8.30%**	**8.32%**	**8.35%**

For U.S. private industry, employment growth during the years 2009 through 2012 was comparable to the employment trends experienced for the U.S. economy as a whole. As shown in Table 5, total U.S. private employment increased from 108,306,000 in 2009 to 111,822,100 in 2012. During these years, the core copyright industries maintained a roughly 4.8% share of all private employment while the total copyright industries' share of private employment remained at or near 10% for the entire period.

2009-2012 TOTAL PRIVATE EMPLOYMENT (IN THOUSANDS)

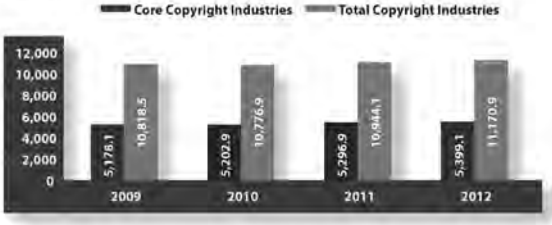
TABLE 5:

	2009	2010	2011	2012
Core Copyright Industries	5,178.1	5,202.9	5,296.9	5,399.1
Total US Private Employment	108,306.0	107,420.1	109,408.3	111,822.1
Core Share of US	**4.78%**	**4.84%**	**4.84%**	**4.83%**
	2009	**2010**	**2011**	**2012**
Total Copyright Industries	10,818.5	10,776.9	10,944.1	11,170.9
Total US Private Employment	108,306.0	107,420.1	109,408.3	111,822.1
Total Share of US	**9.99%**	**10.03%**	**10.00%**	**9.99%**

U.S. copyright industry employment is also expressed in Chart 4. Chart 4 demonstrates graphically that the total number of workers in the core copyright industries consistently increased from 2009 to 2012.[10] Because U.S. total employment also rose in this period, the core copyright industries' share of total U.S. employment remained at approximately 4%, while the total copyright industries' share of employment increased from 8.27% in 2009 to 8.35% in 2012.

US COPYRIGHT INDUSTRY EMPLOYMENT (IN THOUSANDS)

CHART 4:



In this *Report*, we also quantify the average compensation per employee received by workers in the copyright industries and in the U.S. as a whole for the years 2009-2012. In these calculations "compensation" means "wages and salary accruals and supplements to wages and salary accruals."[11] These supplements include "employer contributions for employee pensions and insurance funds and employer contributions for government social insurance." These data are shown in Table 6.

During the period 2009-2012, average compensation per employee in both the core and total copyright industries increased. As shown in Table 6, average compensation earned by core copyright employees stood at $85,643.9 in 2012. This value was nearly 33% higher than the average compensation paid to all U.S. employees in 2012. For total copyright industry workers, average compensation in 2012 was $75,925.9, almost 18% higher than the U.S. average.

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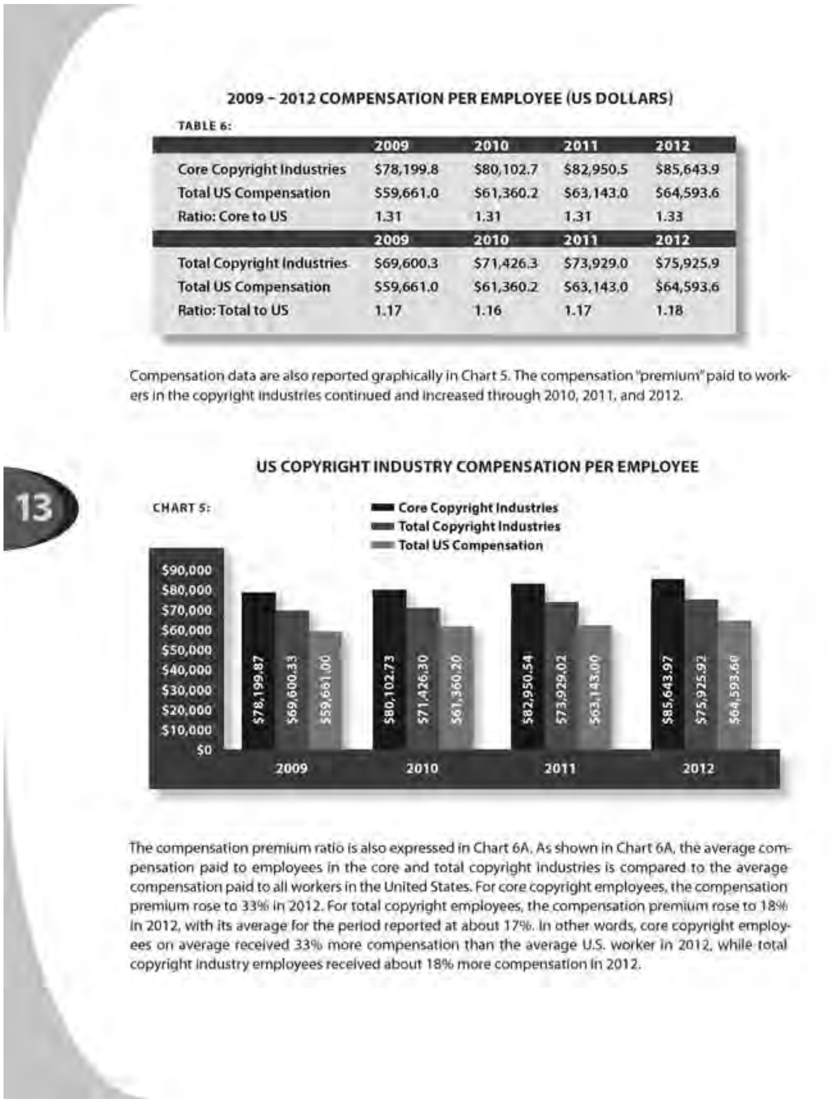
[10] [illegible] the printing sector, have experienced declines in employment since the late 1990s.

[11] The definition of compensation used in this Report tracks that used by the U.S. Bureau of Economic Analysis.



2009 – 2012 COMPENSATION PER EMPLOYEE (US DOLLARS)

TABLE 6:

	2009	2010	2011	2012
Core Copyright Industries	$78,199.8	$80,102.7	$82,950.5	$85,643.9
Total US Compensation	$59,661.0	$61,360.2	$63,143.0	$64,593.6
Ratio: Core to US	1.31	1.31	1.31	1.33
	2009	**2010**	**2011**	**2012**
Total Copyright Industries	$69,600.3	$71,426.3	$73,929.0	$75,925.9
Total US Compensation	$59,661.0	$61,360.2	$63,143.0	$64,593.6
Ratio: Total to US	1.17	1.16	1.17	1.18

Compensation data are also reported graphically in Chart 5. The compensation "premium" paid to workers in the copyright industries continued and increased through 2010, 2011, and 2012.

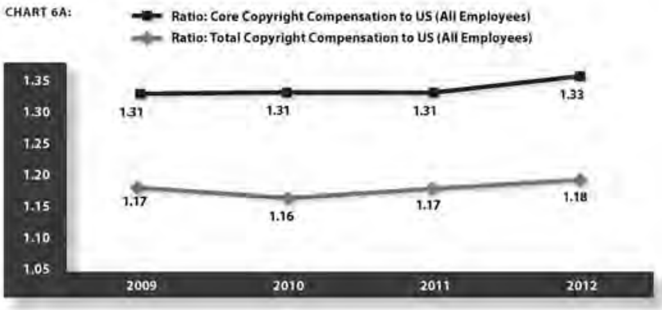
US COPYRIGHT INDUSTRY COMPENSATION PER EMPLOYEE

CHART 5:

The compensation premium ratio is also expressed in Chart 6A. As shown in Chart 6A, the average compensation paid to employees in the core and total copyright industries is compared to the average compensation paid to all workers in the United States. For core copyright employees, the compensation premium rose to 33% in 2012. For total copyright employees, the compensation premium rose to 18% in 2012, with its average for the period reported at about 17%. In other words, core copyright employees on average received 33% more compensation than the average U.S. worker in 2012, while total copyright industry employees received about 18% more compensation in 2012.

US COPYRIGHT INDUSTRY COMPENSATION RATIOS COMPARED TO ALL US EMPLOYEES (1.00=100%)

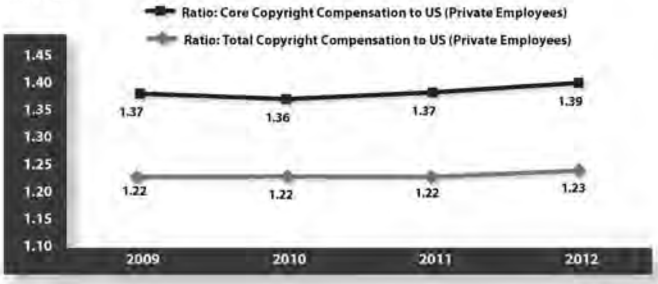
CHART 6A:



As noted, copyright industry workers are paid more than the average U.S. worker in private industry, and the compensation premium is even more pronounced when copyright workers are compared with only private industry workers. As shown in Chart 6B, the compensation paid to workers in the core copyright industries has generally been about 37% higher than the average compensation paid to U.S. private industry employees, and rose to a 39% compensation premium in 2012. Similarly, the compensation paid to workers in the total copyright industries has generally been about 22% higher than the average compensation paid to U.S. private industry employees as a whole, rising to a 23% compensation premium in 2012.

US COPYRIGHT INDUSTRY COMPENSATION RATIOS COMPARED TO PRIVATE US EMPLOYEES (1.00=100%)

CHART 6B:



VI. U.S. COPYRIGHT MATERIALS IN WORLD MARKETS

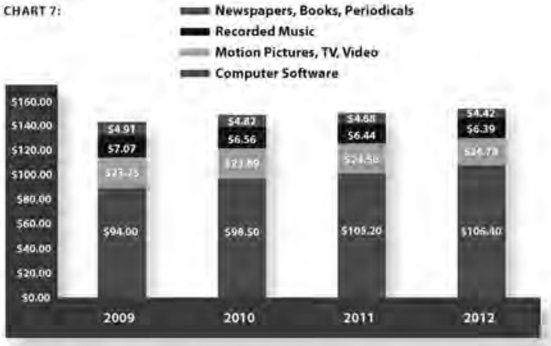
Consumers in non-U.S. markets continue to demand products that embody American creativity. Copyright products that are sold abroad may be manufactured in the U.S. or in foreign markets but, in either case, the creative components of those products are nurtured by the protection afforded under U.S. laws.

As noted in prior reports on these industries, we believe that the U.S. government's statistics on "exports" of copyright products fail to accurately measure the true value of American copyright works sold abroad, particularly in light of the increasing importance of digital trade in legitimate copyright goods and services around the globe. We recognize that, in recent years, efforts have been undertaken to improve the scope of the copyright product export statistics that are gathered in government surveys. For example, the U.S. Census Bureau now reports "Estimated Export Revenue for Employer firms," for a number of the copyright industries including the motion picture industry and the sound recording industry.[12] However, the export statistics reported by Census are substantially lower than foreign market sales figures derived from non-government sources.

As in past reports, we again provide estimates of foreign sales and exports for four selected core copyright industries during the years 2009 through 2012. These core industries are: the sound recording industry, the motion picture industry, the computer software industry, and the non-software publishing industry which includes newspapers, books, and periodicals. For these years, we report total foreign sales for the "selected" core copyright industries of $129.2 billion in 2009,[13] $133.8 billion in 2010, $140.9 billion in 2011, and $142.0 billion in 2012. In Chart 7, these estimates are disaggregated as among the four copyright industries studied. The underlying figures by industry are also provided in Appendix A, Table A.5.

2009-2012 REVENUE GENERATED BY FOREIGN SALES/EXPORTS OF SELECTED COPYRIGHT INDUSTRIES (IN BILLIONS OF DOLLARS)

CHART 7:



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[12] See, e.g., U.S. Census Bureau, Information Sector Services (NAICS 51), *Estimated Export Revenue for Employer Firms*.

[13] See *Copyright Industries in The U.S. Economy: The 2011 Report*, Table 4.5, page 17.

Annual growth rates for foreign sales of the selected core copyright industries are provided in Table 7. As shown below, foreign sales for these industries increased substantially in 2010 and 2011 but remained essentially flat in 2012.

ANNUAL GROWTH RATE OF FOREIGN SALES AND EXPORTS

TABLE 7:

	2010	2011	2012
Growth Rate	3.6%	5.3%	0.8%

In addition, the foreign sales/exports of the core copyright industries remain significantly larger than the exports of many other major industry sectors. As reported in Table 8, in 2011, the core copyright industries generated non-U.S. sales of $140.9 billion, exceeding foreign sales and/or exports for other key sectors of the U.S. economy, including chemicals (excluding pharmaceuticals and medicines), aerospace products and parts, agricultural products, food and kindred products, and pharmaceuticals. In 2012, the core copyright industries generated non-U.S. sales of $142.0 billion, again out-performing most industry sectors surveyed, including U.S. aerospace exports ($105.8 billion), U.S. agricultural exports ($71.1 billion), food ($64.7 billion), and pharmaceuticals and medicines ($50.9 billion). By contrast, the U.S. chemical industry (excluding pharmaceuticals and medicines) achieved slightly higher foreign sales of $146.7 billion in 2012.[14]

FOREIGN SALES AND EXPORTS FOR SELECTED INDUSTRIES (BILLIONS OF US DOLLARS)

TABLE 8:

	2011	2012
Selected Copyright Industries (Computer Software; Motion Pictures, TV, Video; Recorded Music; Newspapers, Books, Periodicals)	$140.9	$142.0
Chemicals (excluding Pharmaceuticals & Medicines)	$131.6	$146.7
Aerospace Products & Parts	$89.4	$105.8
Agricultural Products	$72.0	$71.1
Food and Kindred Products	$59.9	$64.7
Pharmaceuticals & Medicines	$47.9	$50.9

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[14] In this Report, U.S. exports by industry were taken from the International Trade Statistics Center [illegible] data from the U.S. Census Bureau. Export statistics by industry were identified by NAICS code.

VII. CONCLUSION

The U.S. copyright industries have consistently outperformed the rest of the U.S. economy, in terms of their real annual growth rates and their contributions to the overall growth of the U.S. economy as a whole. These industries also command significant shares of U.S. gross domestic product and they employ millions of U.S. workers. In addition, the average compensation paid to U.S. workers in the copyright industries consistently and substantially exceeds the average compensation level paid to U.S. workers as a whole, and even more significantly exceeds the average compensation paid to U.S. private sector workers. Finally, the copyright industries continue to play a prominent role in the growth of U.S. exports.

Value added in the copyright industries continues to grow. As of 2012, the value added by the core copyright industries exceeded $1 trillion ($1,015.6 billion) for the first time, approximately 6.48% of U.S. GDP. In the same year, value added for the total copyright industries stood at well over $1.7 trillion ($1,765.2 billion), amounting to 11.25% of GDP. In 2009-2010, 2010-2011, and 2011-2012, the real annual growth rates achieved by both the core and total copyright industries were significantly higher than the real annual growth rates exhibited by the U.S. as a whole.

The U.S. core copyright industries now employ nearly 5.4 million workers while some 11.2 million people are employed by the total copyright industries. The annual compensation paid to core copyright workers now exceeds the average annual compensation paid to all U.S. workers by 33%. The average compensation paid to employees of the total copyright industries exceeds the U.S. average by 18%. Compared with all private sector workers, the compensation premium comes in even higher, at 39% for core copyright industry workers, and 23% for total copyright industry workers.

Sales for U.S. copyright sectors continue to expand in overseas markets. We estimate that total core copyright sales in foreign markets for four major copyright sectors exceeded $129 billion in 2009, and $142 billion in 2012. The foreign sales of the copyright industries continue to exceed foreign sales of many other U.S. industries including aerospace, agricultural products, food and kindred products, and pharmaceuticals and medicines.

These consistently positive trends solidify the status of the copyright industries as a key engine of growth for the U.S. economy as a whole. New technologies leading to the development of new distribution methods for legitimate copyrighted products, supported by good laws and enforcement, will allow the U.S. copyright-based industries to enjoy economic growth in the future.

APPENDIX A: TABLES OF STATISTICS

CORE COPYRIGHT INDUSTRIES
VALUE ADDED TO US GDP

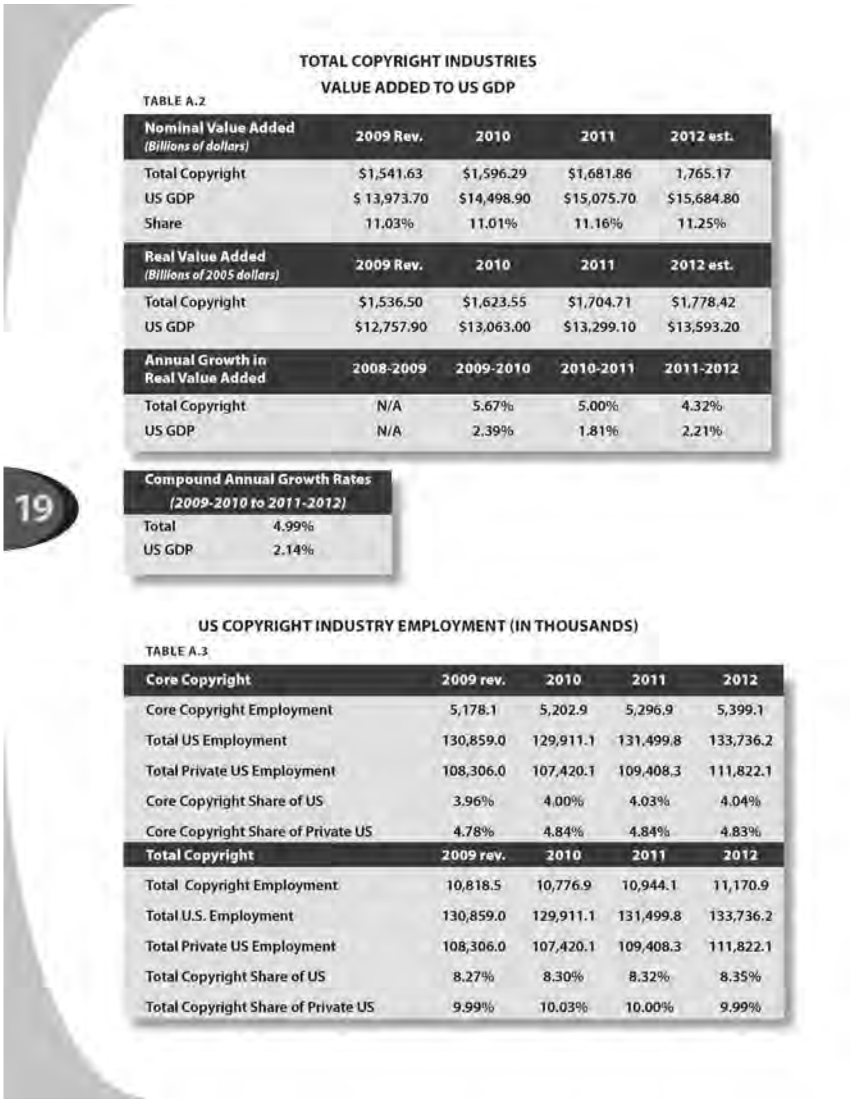
TABLE A.1

Nominal Value Added *(Billions of dollars)*	2009 Rev.	2010	2011	2012 est.
Core Copyright	$884.81	$910.38	$965.08	$1,015.64
US GDP	$13,973.70	$14,498.90	$15,075.70	$15,684.80
Share	6.33%	6.28%	6.40%	6.48%

Real Value Added *(Billions of 2005 dollars)*	2009 Rev.	2010	2011	2012 est.
Core Copyright	$864.05	$900.44	$955.10	$992.46
US GDP	$12,757.90	$13,063.00	$13,299.10	$13,593.20

Annual Growth in Real Value Added	2008-2009	2009-2010	2010-2011	2011-2012
Core	N/A	4.21%	6.07%	3.91%
US GDP	N/A	2.39%	1.81%	2.21%

Compound Annual Growth Rates *(2009-2010 to 2011-2012)*	
Core	4.73%
US GDP	2.14%



TOTAL COPYRIGHT INDUSTRIES VALUE ADDED TO US GDP

TABLE A.2

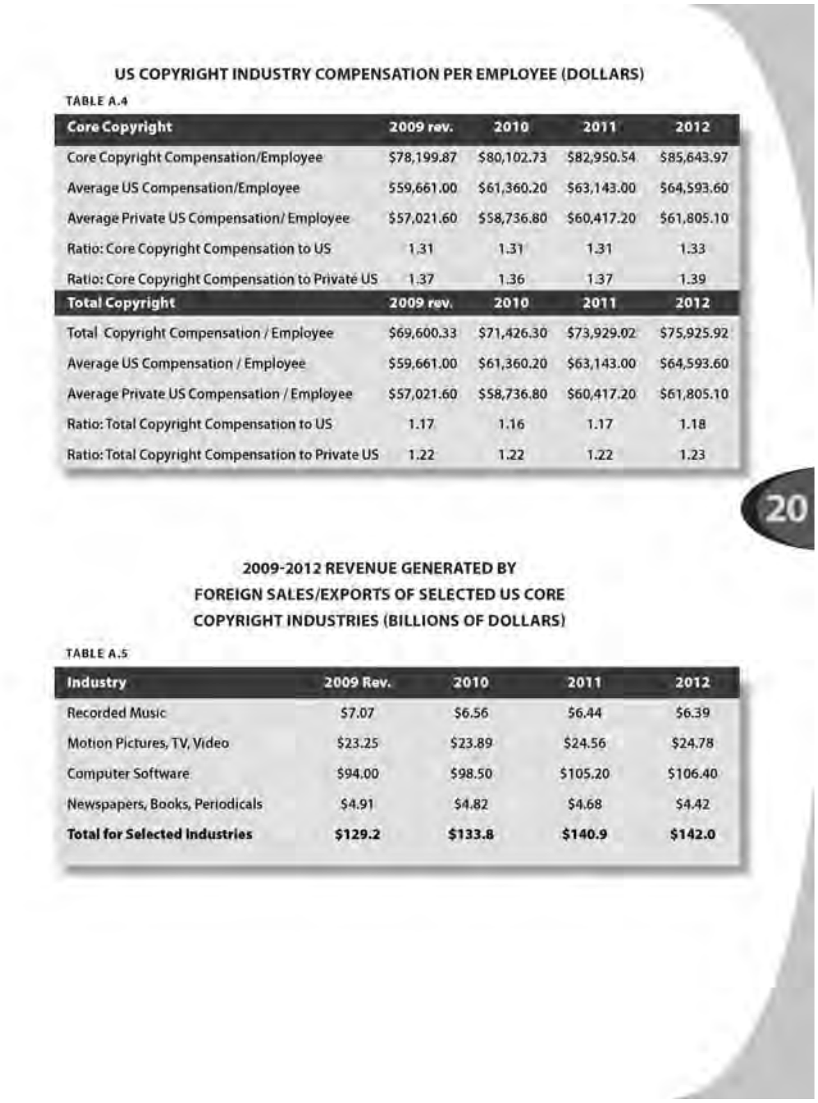
Nominal Value Added *(Billions of dollars)*	**2009 Rev.**	**2010**	**2011**	**2012 est.**
Total Copyright	$1,541.63	$1,596.29	$1,681.86	1,765.17
US GDP	$ 13,973.70	$14,498.90	$15,075.70	$15,684.80
Share	11.03%	11.01%	11.16%	11.25%
Real Value Added *(Billions of 2005 dollars)*	**2009 Rev.**	**2010**	**2011**	**2012 est.**
Total Copyright	$1,536.50	$1,623.55	$1,704.71	$1,778.42
US GDP	$12,757.90	$13,063.00	$13,299.10	$13,593.20
Annual Growth in Real Value Added	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Total Copyright	N/A	5.67%	5.00%	4.32%
US GDP	N/A	2.39%	1.81%	2.21%

Compound Annual Growth Rates *(2009-2010 to 2011-2012)*	
Total	4.99%
US GDP	2.14%

US COPYRIGHT INDUSTRY EMPLOYMENT (IN THOUSANDS)

TABLE A.3

Core Copyright	**2009 rev.**	**2010**	**2011**	**2012**
Core Copyright Employment	5,178.1	5,202.9	5,296.9	5,399.1
Total US Employment	130,859.0	129,911.1	131,499.8	133,736.2
Total Private US Employment	108,306.0	107,420.1	109,408.3	111,822.1
Core Copyright Share of US	3.96%	4.00%	4.03%	4.04%
Core Copyright Share of Private US	4.78%	4.84%	4.84%	4.83%
Total Copyright	**2009 rev.**	**2010**	**2011**	**2012**
Total Copyright Employment	10,818.5	10,776.9	10,944.1	11,170.9
Total U.S. Employment	130,859.0	129,911.1	131,499.8	133,736.2
Total Private US Employment	108,306.0	107,420.1	109,408.3	111,822.1
Total Copyright Share of US	8.27%	8.30%	8.32%	8.35%
Total Copyright Share of Private US	9.99%	10.03%	10.00%	9.99%



US COPYRIGHT INDUSTRY COMPENSATION PER EMPLOYEE (DOLLARS)

TABLE A.4

Core Copyright	2009 rev.	2010	2011	2012
Core Copyright Compensation/Employee	$78,199.87	$80,102.73	$82,950.54	$85,643.97
Average US Compensation/Employee	$59,661.00	$61,360.20	$63,143.00	$64,593.60
Average Private US Compensation/ Employee	$57,021.60	$58,736.80	$60,417.20	$61,805.10
Ratio: Core Copyright Compensation to US	1.31	1.31	1.31	1.33
Ratio: Core Copyright Compensation to Private US	1.37	1.36	1.37	1.39
Total Copyright	**2009 rev.**	**2010**	**2011**	**2012**
Total Copyright Compensation / Employee	$69,600.33	$71,426.30	$73,929.02	$75,925.92
Average US Compensation / Employee	$59,661.00	$61,360.20	$63,143.00	$64,593.60
Average Private US Compensation / Employee	$57,021.60	$58,736.80	$60,417.20	$61,805.10
Ratio: Total Copyright Compensation to US	1.17	1.16	1.17	1.18
Ratio: Total Copyright Compensation to Private US	1.22	1.22	1.22	1.23

2009-2012 REVENUE GENERATED BY FOREIGN SALES/EXPORTS OF SELECTED US CORE COPYRIGHT INDUSTRIES (BILLIONS OF DOLLARS)

TABLE A.5

Industry	2009 Rev.	2010	2011	2012
Recorded Music	$7.07	$6.56	$6.44	$6.39
Motion Pictures, TV, Video	$23.25	$23.89	$24.56	$24.78
Computer Software	$94.00	$98.50	$105.20	$106.40
Newspapers, Books, Periodicals	$4.91	$4.82	$4.68	$4.42
Total for Selected Industries	**$129.2**	**$133.8**	**$140.9**	**$142.0**

APPENDIX B: BEA'S REVISIONS IN TREATMENT OF ENTERTAINMENT EXPENDITURES

Introduction

In July 2013, the U.S. Bureau of Economic Analysis ("BEA") announced changes in how it accounts for the costs of producing "artistic originals" in the determination of U.S. Gross Domestic Product ("GDP"), classifying them as an investment as opposed to current expenditures. Artistic originals include "books, movies, TV shows, music, photographs and greeting cards…"[15] The revisions have been undertaken as part of the BEA's 14th comprehensive revision of the U.S. national income and product accounts.

Historically, industry expenditures for entertainment, literary and artistic "originals" have been recorded as intermediate inputs used up during the production of other goods. Because the costs of these originals were treated as intermediate inputs, they were not included in U.S. GDP. From an end-user viewpoint however, these costs were recovered as part of the ticket sales, DVD sales and rental fees that the entertainment industries charged to view the final creative product.

In accord with its 14th comprehensive revision, the BEA now treats the costs of certain artistic originals not as current expenditures but rather as long-lived investments. In BEA's view, "These expenditures have many characteristics of other fixed assets – ownership rights can be established – and they are long lasting and used repeatedly in production processes."[16]

Measurement Process

In order to implement the proposed revisions, BEA is adopting the following procedure. First, BEA is estimating the total current period revenue from licensing fees, merchandise sales, ticket sales, and other revenue generating activities for the industries producing the assets.[17] Second, the value of sales costs – such as advertising, manufacturing of reproductions, and other marketing type costs – are subtracted from the total current period revenues to derive net revenue values. Third, these net revenue values are adjusted further to include only the revenue from the release of new works (that is "originals") using BEA-derived investment values.

In the final step of the analysis, BEA is making use of Net Present Value ("NVP") ratios to complete its valuations of these assets. BEA assumes a seven percent (7%) real discount rate for all asset types and is applying an NPV adjustment factor, a ratio that represents the average NPV-to-current period revenues from new works, to current year revenues. This procedure permits BEA to derive estimates of the net current investments made by businesses in entertainment originals for any given year.[18]

As part of this process, BEA must also determine the appropriate service lives and depreciation rates to apply to particular entertainment investments over time. BEA estimates applying the following annual depreciation rates to specific types of entertainment assets: motion pictures – 3.8%; television programs – 16.8%; music – 26.7%; books – 12.1%; and theatrical play scripts, greeting card designs and stock photography – 10.9%.[19]

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[15] *Somes, Jeff, Getting Creative with the GDP,* [illegible]

[16] *See BEA Expands Coverage of Intellectual Property Products* [illegible]

[17] *See Preview of the 2013 Comprehensive Revision of the National Income and Product Accounts, March 2013,* [illegible]

[18] *Id. page 19.*

[19] *Id.*

Initial Results

Based on the methodology described above, BEA developed estimates of the net current investment values of long-lived entertainment, literary and other artistic originals in 2007.[20] The industries analyzed by BEA included theatrical movies, television programs, books, music and miscellaneous entertainment. The miscellaneous category included three types of long-lived entertainment: theatrical play scripts, greeting card designs and commercial stock photography.

Recalculating its previous treatment of "artistic originals," BEA concluded that its new methodology for these products results in an increase in U.S. GDP of $70.6 billion in 2007. This figure represents the "current period investment value of the future revenue streams" associated with new entertainment, literary and other artistic originals. Within this total, BEA derived separate investment values for theatrical movies, television programs, books, music and miscellaneous entertainment.

At this writing, BEA has not yet made use of the methodology described above to produce revised estimates of annual GDP by industry. Indications are that applying its methodology would result in increases in the contribution of industries associated with "artistic originals." BEA is expected to publish revised estimates of annual value added by industry in December 2013. However, given the lack of revised data to date, the U.S. copyright industry results presented in this *Report* do not reflect the possible effect of the BEA capitalization procedures.

APPENDIX C: LIST OF REFERENCES

Box Office Mojo, *Overseas Total Box Office Index*, 2011 and 2012.

Elrod, Aaron A., Lindberg, Brian M., Morgan, Edward T., *Annual Industry Accounts: Advanced Statistics on GDP by Industry for 2012*, Survey of Current Business, May 2013.

Independent Film and Television Alliance (IFTA), *Weekend Box Office for Independent Films*, 2012, 2013.

International Federation of the Phonographic Industry (IFPI), *IFPI Digital Music Report 2013*.

International Federation of the Phonographic Industry (IFPI), *Recording Industry in Numbers*, 2012, 2013.

Kim, Donald D., Gilmore, Teresa L., Jolliff, William A., *Annual Industry Accounts: Advanced Statistics on GDP by Industry for 2011*, Survey of Current Business, May 2012.

Motion Picture Association of America, *Total International All Media Revenue*, 2008, 2009 and 2010.

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[20] BEA also developed estimates of the value of long-lived investments made in software. BEA estimated that U.S. businesses and governments invested $278 billion in long-lived software assets in 2007.

Siwek, Stephen E., *Copyright Industries in the U.S. Economy: The 2011 Report*, November 2011.

Soloveichik, Rachel H., *Long-Lived Television Programs as Capital Assets*, BEA Working Paper (WP2013-09), June 2013.

Soloveichik, Rachel H., *Theatrical Movies as Capital Assets*, BEA Working Paper (WP2013-7), June 2013.

U.S. Bureau of Economic Analysis, *BEA Expands Coverage of Intellectual Property Products*, 2013.

U.S. Bureau of Economic Analysis, GDPbyInd VA NAICS, *Gross Domestic Product-by-Industry Accounts*.

U.S. Bureau of Economic Analysis, *Glossary Index*, 2013.

U.S. Bureau of Economic Analysis, *Industry Data, Full-Time and Part Time Employees by Industry* (2004-2011).

U.S. Bureau of Economic Analysis, Survey of Current Business, *Preview of the 2013 Comprehensive Revision of the Industry Economic Accounts*, June 2013.

U.S. Bureau of Economic Analysis, Survey of Current Business, *Preview of the 2013 Comprehensive Revision of the National Income and Product Accounts*, March 2013.

U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *2011 Service Annual Survey* (2007-2011).

U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *Estimated Quarterly Revenue for Employer Firms*, 2010, 2011, and 2012.

U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *U.S. International Trade Statistics, Censtats Data Base.*

U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, Foreign Trade Division, *Trade Stats Express, Exports by Product and by Year.*

U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, Information Sector Services (NAICS 51), *Estimated Export Revenue for Employer Firms*.

U.S. Department of Labor, Bureau of Labor Statistics, *Employment, Hours and Earnings from the Current Employment Statistics Survey* (National).

U.S. Department of Labor, Bureau of Labor Statistics, *Subject Areas: Overview of BLS Statistics on Employment*.

Somer, Jeff, *Getting Creative with the GDP*, New York Times, July 28, 2013, available at http://www.nytimes.com/2013/07/28/.

Washington, Patricia A., Bellone, Jeff M., Jacobson, Anna M., Lee, Jennifer, *Annual Industry Accounts: Revised Statistics for 2009-2011*, Survey of Current Business, December, 2012.

World Intellectual Property Organization, *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*, WIPO Publication No. 893(E), ISBN 92-805-1225-7.

World Intellectual Property Organization, *Copyright + Creativity = Jobs and Economic Growth: WIPO Studies on the Economic Contribution of the Copyright Industries* (2012).

World Intellectual Property Organization, *2013 WIPO Studies on the Economic Contribution of the Copyright Industries Overview* (2013).

Copyright Industries in the U.S. Economy: The 2013 Report

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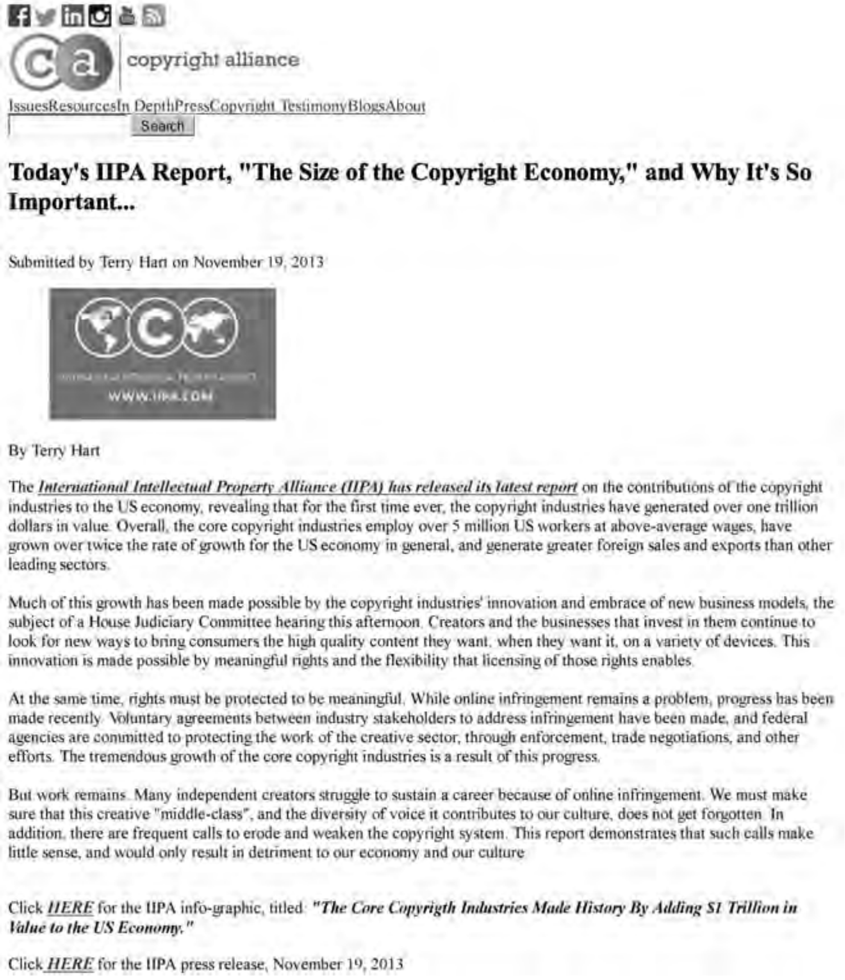

Today's IIPA Report, "The Size of the Copyright Economy," and Why It's So Important...

Submitted by Terry Hart on November 19, 2013

By Terry Hart

The ***International Intellectual Property Alliance (IIPA) has released its latest report*** on the contributions of the copyright industries to the US economy, revealing that for the first time ever, the copyright industries have generated over one trillion dollars in value. Overall, the core copyright industries employ over 5 million US workers at above-average wages, have grown over twice the rate of growth for the US economy in general, and generate greater foreign sales and exports than other leading sectors.

Much of this growth has been made possible by the copyright industries' innovation and embrace of new business models, the subject of a House Judiciary Committee hearing this afternoon. Creators and the businesses that invest in them continue to look for new ways to bring consumers the high quality content they want, when they want it, on a variety of devices. This innovation is made possible by meaningful rights and the flexibility that licensing of those rights enables.

At the same time, rights must be protected to be meaningful. While online infringement remains a problem, progress has been made recently. Voluntary agreements between industry stakeholders to address infringement have been made, and federal agencies are committed to protecting the work of the creative sector, through enforcement, trade negotiations, and other efforts. The tremendous growth of the core copyright industries is a result of this progress.

But work remains. Many independent creators struggle to sustain a career because of online infringement. We must make sure that this creative "middle-class", and the diversity of voice it contributes to our culture, does not get forgotten. In addition, there are frequent calls to erode and weaken the copyright system. This report demonstrates that such calls make little sense, and would only result in detriment to our economy and our culture.

Click ***HERE*** for the IIPA info-graphic, titled: ***"The Core Copyrigth Industries Made History By Adding $1 Trillion in Value to the US Economy."***

Click ***HERE*** for the IIPA press release, November 19, 2013

Ms. CHU. Thank you so much.

Well, my first question is for Mr. McCoskey. One of the consumer complaints out there is that content creators do not do enough to make their works available and accessible. But, now we have more than 90 legitimate streaming services offering movies and TV shows in the U.S., such as Amazon, Netflix and UltraViolet, just to name a few. There is truly a service for every type of content consumer out there, whether it is for your smartphone or tablet so that you can watch whatever, whenever you want.

And although Americans legally consumed about 3.5 billion hours of movies online in 2012, a recent study by NetNames showed that 24 percent of total Internet bandwidth worldwide involves traffic on infringing sites and services. Why do you think that is the case, considering the rise of all these innovative ways for consumers to watch content legally in their digital space? And what more can the key players in the Internet ecosystem do about this?

Mr. MCCOSKEY. Well, as you have pointed out, this is a problem that continues to evolve. And so, the fact that now there are 90 places that you can find legitimate in the—content in the country is important. And that number is growing. But the reality is that piracy still is a big issue for the industry. This is a multi-stakeholder ecosystem. And we think that voluntary measures of getting all the players together in the ecosystem are working toward solving that issue. So, for example, we have a thing we call the Copyright Alerting System that helps identify when consumers are accessing infringed content. And we use that as a mechanism along with other players in the ecosystem. But, it is a constant issue and it is evolving and we think the best way to deal with that is to continue talking and working with every player in the ecosystem.

Ms. CHU. Okay.

Mr. Misener, I want to thank you for testifying on behalf of Amazon today. Not only am I a longtime Amazon Prime member, but a fan—I am also a fan of Prime Instant Video. So, I certainly enjoy what you're doing. And it is great to see that your company is now contributing to the Internet ecosystem with creative works, with your Alpha House in which you have invested $11 million. But, you now would be facing unauthorized streaming. And so, I was a bit curious about your role or your stance on statutory damage, because now you could be the victim of this piracy. What is—how do you reconcile that?

Mr. MISENER. Yeah. Thanks, Ms. Chu, very much.

Amazon abhors piracy. We have from our very beginning. Our very first day was selling legitimate copyrighted works. And so, every time some pirated material is used or made available a sale is lost. So we are in a position of always trying to work with content creators and now with original content creators, like with Amazon Studios, we want to be in a position to ensure that legitimate copyrighted works are available conveniently at competitive prices for our customers. And that is going to dissuade piracy in the first instance.

As far as the statutory damages go, the limitations that we are suggesting are ones that go to legitimate mistakes, perhaps. When someone has—makes a good faith effort and perhaps comes up against—they believe they are not infringing or they believe that they are engaged in fair use in a legitimate way. Or for example, if they are at a point where there is a novel question of law that is raised and reached by a court. At that point, that is where the statutory damages ought to be limited.

Ms. CHU. Okay.

Well, I think my time is out so——

Mr. COBLE. The gentlelady's time is expired.

The distinguished gentleman from Pennsylvania, Mr. Marino?

Mr. MARINO. Thank you, Chairman.

Good afternoon, gentlemen, thank you for being here.

I have been studying search engines for some time now, several weeks now. I have been studying the types of search engines and the big search engines that are out there. And one thing that seems to be a common thread running through the search engines are: even though we are aware of a pirate Web site, whether it is telling us that we can give this—send this music free or they charge us 10 cents for it or movies or any other technology that you want to get into—they are appearing at the top of Web—of the search engines as an entity, which one can get into immediately.

Do you understand my question so far?

Okay. No response. You must understand it.

What do we do, what does industry do, what do the search engines do about having these pirate sites pop up at the top of a search, compared to the legitimate entities that are out there that are several pages down? Anyone care to venture into this first?

It is like school, I will call on you.

Mr. Misener?

Mr. MISENER. I can defer to my colleagues. [Laughter.]

So, naturally we like it when Amazon shows up first. But, when it doesn't——

Mr. MARINO. Very legitimate.

Mr. MISENER [continuing]. There should be a good reason for it. And so, I—we don't have a search engine business, per se. We have a site that is searchable, obviously. But it is a question—it is a difficult question. We think that the DMCA is out there for addressing infringement on particular Web sites, right? There is this notice and takedown provision for platforms. And we think that is what strikes the right balance between the interests of the creative community and the platform operators.

But, as far as Web site searches themselves go, I think maybe Mr. McCoskey has a stronger view.

Mr. MARINO. Mr. McCoskey? Because I have—last weekend I visited New York and had the opportunity to visit businesses. And one of their biggest complaints, in the technology end of things, was piracy. And I actually took down a couple of rogue sites. But we know that as soon as that site is taken down, ten others go up. So, again, to reiterate my question so it is clear I probably didn't present it clearly. What do we do about preventing those rogue sites popping up at the top of the list?

Because how many of us go through page after page to find a legitimate entity? No, we look at the first three or four. And routinely I am coming up with the first two or three, at least, are rogue sites. And the reason I know this is because my kids, 18 and

14, and I—you saw me come in with my music. And I download music and listen to it all the time, but they tell me, "Dad, stay away from this one and stay away from that one, because a guy in your position can't afford to have headlines saying that I am downloading music and not paying for it." And I have to agree with them.

So, how do we address this issue? How does—from a technical standpoint, how does the industry address this? Because I am not—you notice I am not mentioning any names, and I do not want to, because I have been in rooms where we have taken down things by all the big companies.

Mr. MCCOSKEY. So, I think the—you know, it is a big problem and it is a dynamic problem, so it does change. I think it is a combination of approaches to this. The most important one, we believe, is actually having a dialogue between the players and the ecosystem, who are generally not bad actors. The bad actors are the infringing sites. And working together on algorithm changes.

And an example we have is we did work with one of the big search players several months ago. They did an algorithm change, targeted at reducing the problem that you have identified. And, unfortunately, the results of—after several months of that change, where that did not really change the problem much. So, we are going to go back to the table and work with them on tying to modify algorithms to the point that we can change that equation. But it is a problem.

Mr. MARINO. Is—as we were talking and doing this right here on an iPad and I know that the three that came up are rogue Web sites. They are at the top. So, I would prefer that the industry take care of this, we not legislative, but seriously take care of this because this is one of the biggest complaints I am hearing.

And then I also want to address——

Mr. HOLST. Yeah, I——

Mr. MARINO. Go ahead, John.

Mr. HOLST. I would say, first, that it—algorithms can address, at a moment in time, the kinds of issues that you are raising. But, it is a cat-and-mouse game. So, as soon—you know, people—the game of trying to gain the search algorithms for both good, you know, good actors and bad actors, started on the first day of the search engine. One of the differences though is that, if you are a bad actor, you will say and do anything because why not, right? So it is very similar to making false claims, you know, on a product you might sell in an infomercial. And so, they will play with metadata. They will play with false endorsements. They will make up phantom accounts. So they do cheat, you know. So, by—so on the technical, it is a cat-and-mouse game. It will be—I do not think you can ever stamp it out——

Mr. MARINO. I see that my time has run out. So, if you could—if you would like to respond in writing to me. And I would love to hear from anyone on how we resolve this.

I yield back. Thank you, Chair.

Mr. COBLE. The gentleman's time is expired.

The distinguished gentleman from Michigan, Mr. Conyers is recognized.

Mr. CONYERS. Thank you, Mr. Chairman.

This is a very interesting and very important hearing. But, what are your opinions about voluntary solutions? Are we relying too heavily on this? Or is this just a, you know, polite discussion here that nobody really sees as a serious way to reduce piracy? What are any of your thoughts about that?

Mr. SOHN. Sure, I will weigh in on that. I think voluntary solutions can be a very productive way to try to reduce infringement. I think there are opportunities. The Copyright Alert System is a system that is launched between the major ISPs and some of the major rights holders. And I think that is an example of an effort that is voluntary. It is aimed primarily at education to make sure that users understand the difference between infringing behavior and lawful behavior.

So, I think there is a role for discussion on voluntary measures. I think there is also—it is important that we be somewhat cautious in approaching those as well in that the more voluntary measures aim at punishing or sanctioning particular entities, the more it starts getting into a role that we normally do through government or with some kind of due process. And so the balance for voluntary measures is to figure out where they can be productive without causing risks of overreaching or abuse or short-circuiting the due process that we would normally expect.

Mr. CONYERS. Mr. Misener?

Mr. MISENER. Yes, Mr. Conyers. I think it is a great question. The way we have tried to approach it at Amazon is to make the legitimate content as easily available and as inexpensively available as possible. In books, in particular, we have seen a willingness on customers' behalf to pay for books. They will pay for them. We have over a million that are priced at $4.99 or less, 1.7 million priced at $9.99 or less. And people are happy to pay that if there is an easy way to do it. And so, from an industry player, like Amazon, our goal is to make it easy to obtain that legitimate content for pay.

Mr. CONYERS. Mr. McCoskey.

Mr. MCCOSKEY. So, I think as long as we have a strong support of the property right of the content, the industry is really working together on these kinds of issues and it is a very dynamic situation. You have got all kinds of new distribution paths, new devices for consumption. But, at this point, I think that voluntary approach is—letting the industry try to work this out is really what we would like to see happen.

Mr. HOLST. I would say that detecting bad behavior, preventing it, you know, helping people do the right thing through discovery and ease of use that is a fluid activity that really has to be able to be agile and to move quickly. On the other hand, there needs to be clear guidelines when someone is a bad actor, and that should not be by consensus. That needs support.

Mr. CONYERS. Well, thanks for the variety of views on that subject.

Let us turn to app piracy. Do our current legal tools allow us to effectively address the subject of that piracy at all?

Mr. HOLST. I will go first. I will say, I have actually been the subject of app piracy myself. I have found my content in someone else's app actually beating me in the marketplace because they took my paid version and made it free. And, in fact, the response was quick once I found it, right? So, I think we don't need more legislation. We need—I think we have clear recourse. Again, I think the slippery slope is finding those bad guys quickly and preventing them from reintroducing themselves with a slightly different name, right? But that is—but it is a technical and a community issue. I am not sure I need tougher laws.

Mr. CONYERS. Anyone else want to weigh in on this?

Then I yield back the balance of my time.

Mr. COBLE. Thanks. I thank the gentleman.

In order of arrival time, I recognize the gentleman from North Carolina for the next questioner.

Mr. HOLDING. Thank you, Mr. Chairman. I thank the gentleman from North Carolina.

Mr. McCoskey, the technology obviously changes incredibly quickly today and is something this Committee grapples with and has grappled with throughout history. So, some say recent technological changes demand changes in the copyright law. But, is there really a problem today that needs fixing? I mean, hasn't technological change made it easier to get existing content to viewers? And, in fact, hasn't it also made it easier to get new content to viewers? Isn't it—the video marketplace thriving, you know, under the legal regime that we have right now?

Mr. MCCOSKEY. I think it is doing exactly that. We have this strong property right and because we have that it is encouraging companies to innovate, try new things and work with consumers on what they want. So, I think it is absolutely a good, good program now.

Mr. HOLDING. Mr. Misener, one of your recommendations is for a streamlined statutory licensing process for music. Would an accessible and robust ownership database solve most of the problem of connecting music copyright owners and licenses, without the need for any statutory license?

Mr. MISENER. Thank you for the question.

I think that there is a need for some sort of centralized information source. And I agree that if it were legislated I think it would be obviously taken more seriously perhaps. But, you are right to say that the problem is trying to find information on rights holders and to find the authors and the artists, in order to obtain the license permission to make that content available to our customers. And so, it may go a ways to doing that. I also could see just some reform within the statutory licensing scheme that exists today.

Mr. HOLDING. Lastly, do you, Mr. Sohn—what are the ways that you see, you know, right now that Congress can ensure a robust competition in the marketplace for digital goods?

Mr. SOHN. Well, I think the first things that it can do are take care to preserve those elements of the legal regime that are successfully enabling innovation right now. So, the ones I highlighted in testimony are fair use, which has been the subject of some important court decisions recently. Also section 512 in the DMCA, which provides important safe harbor for innovators. And then, some of the court-made doctrine, particularly the Sony doctrine from the 1984 case involving the VCR, where they said that if a product has a substantial non-infringing use, it is lawful to distribute it even if some users might end up using it for infringement. So, those are some core principles that have enabled innovators to develop innovative technologies, innovative services. And those need to be preserved. I think that is first and foremost.

The second one that I highlight in my testimony is statutory damages reform, because I think that is one that creates very high risk for any company that is trying to navigate an uncertain or unsettled area of the law. And, in this digital age with Internet technologies, we find that happening in copyright law all the time. You have new devices with storage capability that are connected to the Internet, so they can be used to send data. There are lots of ways that copyright creates questions for new technologies. And so, we need a statutory damages regime that doesn't make it too risky to experiment with that.

Mr. HOLDING. Well, you also recognized in your testimony—either written or oral, I didn't hear your oral, but I read your written—that streaming has grown in popularity as a primary means to distribute copyrighted content online and as an alternative to downloading. So, would you therefore agree that criminal penalties for illegal streaming should be on par with penalties for illegal distribution and copyrighting?

Mr. SOHN. I think where the streaming activity is of a scale where it is comparable to a criminal downloader, then yes, there is no particular reason the law should distinguish between the particular mode of infringement. I think what it should focus on is the culpability and the scale of the activity.

Mr. HOLDING. Thank you.

Mr. Chairman, I yield back.

Mr. COBLE. I thank the gentleman from North Carolina.

The distinguished lady from California is recognized.

Ms. BASS. Thank you very much, Mr. Chairman.

I want to thank the witnesses for their testimony today.

I think it is great what companies are doing to promote access to legitimate content, by making it available on so many different devices, platforms and services. And it is particularly mind boggling to think of how much access consumers have to content.

I have also been impressed with what Internet companies are doing to promote content partnerships. And the motion picture and recording industry associations have done great work to help connect content producers with consumers. And I am especially grateful for the ongoing partnerships, since I represent both. In my district there is Sony, Fox Studios, Culver Studios, Google is right next door. There is many other entertainment companies in my district.

The one thing I am concerned about is the BitTorrent sites and I wanted—I know the MPAA won a major copyright victory in its settlement with IsoHunt. But, just a couple of weeks after the settlement, it is my understanding, that fans of the sites created a duplicate site loaded with millions of infringing files. And, I know we all agree we have to stop this. So, I just had a couple of quick questions.

I wanted to know what else do you think the industry could do, besides providing access to content, to help fight BitTorrent sites, is my question.

Mr. MCCOSKEY. So, as I said earlier, this is a dynamic problem. And it is a problem that is still significant for the industry. We think that techniques such as the copyright alerting system, that basically helps consumers understand when they are accessing infringed content, is a good mechanism for battling this. We think—again, back to the multi-stakeholder model of finding the good actors and working together on solving these problems across the whole Internet ecosystem, is a way to address these. But it is—it will be a continuing issue and continuing work and it will adapt and change, you know, as we change our tactics.

Ms. BASS. And do you think that there is a perception that content owners have been slow to get their products out and that that is one of the contributing factors?

Mr. MCCOSKEY. I don't think so. I mean, when you look at how many outlets there are for content now and consumers are finding it in places that they have never been able to find it before legally, I think the industry has done a really good job of actually recognizing the desires of consumers and trying to meet them.

Ms. BASS. Thank you.

And we are still working on getting Amazon to L.A.

Mr. MISENER. I am sorry. Ms. Bass?

Ms. BASS. I said we are still working on trying to get Amazon to L.A.—to move to L.A. Well I know, but, you know, they can expand and they told me about their expansion.

I yield back the balance of my time.

Mr. MISENER. Thank you, Ms. Bass.

Mr. COBLE. I thank the gentlelady.

The gentleman from Utah.

Mr. CHAFFETZ. Thank the Chairman.

And I thank you all for being here. It is an interesting world where—I remember when my son, who is now 20, I remember when he came running around the corner and he said, "Dad! Dad!" And, you know, "Mom, look at this great big CD." It was a record. I was kind of feeling like, "Wow, okay. Things have changed." Now he is 20 and the world is changing ever so fastly.

Mr. Misener, I want to ask you about your perspective where—in the digital age, as we move forward and things become perhaps all digital and move that direction, what happens when you die? What happens when you want to pass that along? Should you own that content? Are—should you have some certain privileges? Should the government just stay out of this? Should every person just make this—every organization make it up and have different rules?

And then, I want to follow up and allow the MPAA to answer this as well.

Mr. MISENER. Thanks, Mr. Chaffetz.

You are talking, in part, about the First Sale doctrine and what happens. And, as you know, for the most part digital downloads and streaming are licenses that are granted to the users. At Amazon, if you do die and your family has access to your account, yes, you get access to that digital content as well. But that seems like kind of an extreme way to circumvent the licensing rule.

So, hopefully this can be resolved in a way that is clear. And I think we are happy to work with the Committee and also——

Mr. CHAFFETZ. But what do you think should happen?

Let me have the MPAA answer and then I will come back to you for a second.

What should happen? Somebody gets an extensive library of movies, you know when they purchase a DVD it is pretty simple, right? But, when they go out and they license all this, do they own it? Do they not own it? Is it a combination? What is the right answer?

Mr. MCCOSKEY. I think it is a grey area today. And I will say that with a flag that says I am an engineer not a lawyer. And—but I do think, when you look at a product like the motion picture industries put together like UltraViolet, one of the things that anticipated is the need to share content across accounts. So that is one way to deal with that is to allow multiple people actually to have access to that content, you know, as long as they are——

Mr. CHAFFETZ. So, let us say I go out and I purchase a thousand movies over the course of time, which seems like we have done in our family. And I wanted to sell that. Are you okay if I sell that?

Mr. MCCOSKEY. Again, I am going to claim to be an engineer here and not go down the legal path on that.

Mr. CHAFFETZ. And I guess for my colleagues on the Committee, this is one of the questions is who owns that? And you are right this is First Sale doctrine and how does that work in an electronic age? So, does——

Mr. Sohn, did you—I see you nodding your head. Please, jump on in here.

Mr. SOHN. Sure. No, I think you have put your finger on a really important issue. The First Sale doctrine, as it currently exists in law, seems to be mostly focused on tangible products. But certainly consumers have some expectation that when they have engaged in a transaction that looks like a purchase, that they ought to have some rights to then dispose of that content down the line or share it and so forth. And I think it is an important issue for the Subcommittee to consider as it is reviewing copyright law is how can we structure some approach to these issues that works for the digital age that recognizes both that, when people purchase things, they do want to be able to pass them along. But, at the same time, to recognize that there are a lot of new business models out there, often people get things on a subscription basis, and it is less clear that that is really an appropriate context in which First Sale should apply. So——

Mr. CHAFFETZ. All right, so——

Mr. SOHN [continuing]. An appropriately cabined First Sale doctrine that applies to the digital age is, I think, something Congress should work on.

Mr. CHAFFETZ. And I guess it is—and we will allow you, Mr. Holst, to jump on in here—but that is one of the core questions. We got the question somewhat surrounded. But I need help for you all and others in the audience, what is the answer to these questions, not just restating the question.

But—Mr. Holst, please jump in here. I think my time is expiring. So——

Mr. HOLST. I would just say that however you land on that—the always to that question, transparency and consistency, is the most important thing. If people know what is expected, most will comply. So confusion is way worse than a slightly imperfect——

Mr. CHAFFETZ. So, if I said that you—when you buy it you own it, you should be able to do what you want with it. Is that—would everybody agree or disagree with that?

Mr. HOLST. I would say—briefly, I would say, if that was the term at the point of sale, I would reflect that in my price and in my model and I could be fine with it.

Mr. CHAFFETZ. And I actually like the way a lot of movies you can get right now, you can rent it or you can buy it and purchase it. But I think one of the questions for this Committee is how do we deal with this in a broader context.

I will let you each quickly—but my time is expired, Chairman.

Mr. MISENER. Well, we will work with you, obviously, Mr. Chaffetz, and try to figure this out. It is not an easy question, it goes to the core of copyrights. And it is—you know, we are—I think you are seeing four people who understand the issue and don't have all the answers. But hopefully we will be able to work with the Committee to come up with answers.

Mr. COBLE. The gentleman's time is expired.

Mr. CHAFFETZ. Thank you, Chairman.

Mr. COBLE. And the—gentlemen you will have 5 days to respond to whoever so we are okay time wise.

The distinguished gentleman from Louisiana?

Mr. RICHMOND. Thank you, Mr. Chairman.

Let me just say, as I have been studying these issues, it has become clear and I think that Mr. Chaffetz's questions highlight the complexity of what we are dealing with here. But also, I think that, you know, as you all have testified, the importance of intellectual property and copyright in the country is critically important that we understand and that we get it right. Part of my fear is that we will move so slow, as a deliberative body, that technology will pass us by as we do that.

And sometimes, even as you all in your complex world negotiate, we miss things. And the example I gave today at lunchtime was ringtones. Friends in the music industry came and they said, "Cedric, I realize that I sold a million ringtones and I don't have any money from it." It wasn't covered in the contract because nobody knew you would have ringtones that you could sell. And the question became: who owned it and all of those. So, we have to make sure we get it right. We have to make sure we understand it.

But here is a question that I will pose to anybody out there is that, what are the international implications of any changes we consider to licensing models for digital delivery of content to the consumer? And what are some of the things that we should consider, as we talk about that, to make sure that the global consumer has access to innovative U.S. products via efficient digital delivery and so forth?

Anyone?

Mr. MISENER. Mr. Richmond, I will take a stab at it. I think it is probably a question best addressed by the rights holders, the publishers, and maybe Mr. McCoskey will take a shot at it. But, a lot of the content itself is geographically limited. That is to say that distribution rights are cordoned off by the rights holders. And so, from a technology platform that is global, we would love to see much more trade in this area. But much of it is limited, again, by the rights holders themselves.

Mr. MCCOSKEY. So, I think for our member companies, it is a big part of their business. It is a huge amount of growth in the emerging worlds. And it is a place there—where there is a lot of interest and consumption of American content.

I think, you know, we would certainly like to see, you know, a few barriers to that and a few barriers to the movement of content into those international markets. Now that it is all digital it is pretty ubiquitous, from a distribution standpoint. So, it really comes down to, you know, open markets and, you know, free markets with—around the world.

Mr. HOLST. I would say that the basic constructs of right and wrong in ownership and fairness don't know any international boundaries. So, as a developer and as a vendor who works with lots of developers, we care very much about these issues. But, in terms of implementing and expressing those consistent perspectives that is, I am afraid, beyond the scope—that is an international issue, which I am no expert in. But, the rules should be—the basic rules are the same.

Mr. SOHN. And I would just add, there is—there are trade treaties around these topics that provide for some basic principles of intellectual property internationally. I do think that the basic dynamic is true on a global level the same as it is on a domestic one, which is: it is crucially important that we find ways to license content and distribute content in attractive lawful ways around the world. Because certainly, if content isn't available in those other markets, it is going to fuel piracy in those markets and it is going to fuel sort of the dark side of the market. And we want the lawful market growing.

Mr. RICHMOND. And in—as I close, and you all can submit this in writing or just any ideas that you have that we should keep in mind as we ensure or at least I try to ensure that we look at this from a very balanced approach when we start talking about new content delivery. We are talking about a new consumption economy. But, we also have to make sure that we are still driving innovation and making sure we continue the economic growth. So, anything you have and any thoughts I would certainly appreciate. And my office is always open for you all to drop by and have these conversations.

With that, Mr. Chairman, I yield back.

Mr. COBLE. I thank the gentleman.

The gentleman from Texas.

Mr. FARENTHOLD. Thank you very much, Mr. Chairman.

And I want to revisit the digital First Sale doctrine for a second. You know, back in the old days, when you had a book and you bought it, the copyright holder got paid and then it was your book to sell. And, of course, when you sold it you didn't have it anymore. And that is kind of the problem now in the digital age. You can make a near perfect or perfect copy of something and then sell your original. There is no real technological way to deal with that. Any sort of DRM, digital rights management, you put in get taken away. Do you all see a solution? Or are we really—are looking at something that is dead, from a—digital First Sale is dead, from a practical standpoint.

I will start with Mr. Misener?

Mr. MISENER. Thanks, Mr. Farenthold. I think that we have been able to make a very good business for our customers with the current arrangements of licensing for both books and music and video.

Mr. FARENTHOLD. I did learn from Mr. Chaffetz's line of questioning, I need to give my wife my Amazon password in the event I get hit by a bus. [Laughter.]

Mr. MISENER. And she would have access to it. But again, that seems like a pretty extreme way to handle a First Sale——

Mr. FARENTHOLD. Well, I do buy my MP3s from you because it—they do not come with any DRM. I have got, you know, offices in Corpus Christi and Washington and a laptop. I have run up against the five computer limit on iTunes. So, you do have a competitive advantage there.

But, Mr. McCoskey, do you see a way to make the digital First Sale work?

Mr. MCCOSKEY. Well, I think you have hit on the real issue is that it is different from a physical property. And one of the challenges that we have got is our content creators are taking that same piece of content and selling it different ways. Sometimes they are selling it as a sale, sometimes they are selling it as a rental, sometimes they are selling it as——

Mr. FARENTHOLD. All right. So, when I pay 15 bucks on Amazon or iTunes to, quote, "bu," a movie, am I really just licensing it?

Mr. MCCOSKEY. I think it depends on the actual terms on that sale. And I think that is going to vary widely from distributor to distributor. So, I think—you know, this is going to be one of the topics that I think the Committee is going to dig into in deeper hearings.

Mr. FARENTHOLD. Let us shift gears a little bit and talk about piracy.

I kind of divide pirates into three different groups: those that are out to try to make money from selling copyrighted content, kids who do not know any better or at least say they do not know any better, and then ideologues who think all information should be free. Do you have any sort of breakdown as to the classes? If we were finding as solution, as Chairman Issa has suggested, in, you know, his open and going after the financial end of it. Is that going to solve the problem substantially for you? Or are you going to—are we going to still have a problem with the ideologues and the kids?

Mr. MCCOSKEY. I mean, we go after all of the problems. And I think the problem is, after you go after them, they tend to morph and the shift goes from one to another. You know, if there is piracy out there, we are going to continue to go after it. And going after the folks that are making money on it is a good way to go, but——

Mr. FARENTHOLD. Those are the clear——

Mr. MCCOSKEY. Yeah.

Mr. FARENTHOLD [continuing]. The clear bad actors and seem—would seem to be the low-hanging fruit.

And I guess my other question, and it reflects something some of the other Members have been—I think we really have seen a shift as the cost to find—get legitimate things have come down—music down to under a buck in most cases. These micropayment systems are working. I don't know if that works for the economies of movies and motion pictures. But are—is the delay time in releasing it—you know, you—obviously you want it to play in a theater for a while and then you have different stages you have. Is that delay time driving piracy as people are looking to avoid the movie theater experience and still be culturally hip having, you know—having seen the latest Superman movie without having to go to the theater?

Mr. MCCOSKEY. It is a complex problem, as you know. And I think—what our member companies look to do is actually try and recover the incredible investments they make in these properties. And windowing and the way they release the product across the world is part of that equation. So, it is—there is not even a fixed answer to that.

Mr. FARENTHOLD. All right.

Well, I see I am about out of time. I yield back my last few seconds.

Mr. COBLE. I thank the gentleman.

The distinguished lady from Washington.

Ms. DELBENE. Thank you, Mr. Chair.

And thanks all of you for being here today.

As a representative from Washington State, I can say I know firsthand the impact innovation has had on our economy. And I want to thank you, Mr. Misener, for being here today. Amazon has been a huge contributor to that.

You know, I think you said, Mr. Misener, that four times—people are reading who were reading now were reading four times the number of books that they had before. What do you think are the reasons behind that?

Mr. MISENER. Well, because—thanks, Ms. DelBene, very much. The reasons behind that, I think, are slightly complicated, but they are also right in front of us. I mean, when you use a device, like a Kindle, you can obtain the books, the music, the videos that you want immediately. And it is very convenient. It is a great way to be able access video and music, but also books. So the variety of books that are available on a device like this are staggering and something that local stores just never could keep up with. And it is no slight against them.

But it is that convenience and now with the low pricing. We recognized from the very beginning that our customers wanted the lowest prices for everything. But also the willingness to pay for things, and so it is not free. It is something low. And one thing they also have told us, very clearly, is that they believe that a digital book should be less expensive than a physical book and for the very obvious reasons that there isn't paper and print and covers and shipping and all those things. And so we agree. And those—all those factors, the convenience and the price and the selection have all led to this increase in reading that we see.

Ms. DELBENE. And you think it is for—as a content creator that, even though the price might be lower because it is a different medium, that the increased volume generally leads to a benefit for content creators in terms of getting their information out there and the return they would get?

Mr. MISENER. Yeah, absolutely.

In fact, we have seen a couple of different cases where—well, there are now over a dozen individual authors who have sold a million copies each of a work that they have self-published through Amazon. And that is a big deal. And so—but our—also from the perspective of traditional media, I am not sure you are aware, but many of the books that appear in a physical bookstore end up not being read by anybody, but sent back and actually recycled. And that—those numbers are somewhere on the order of 30 percent of the books are never read. They are actually just shredded. And so that kind of wastefulness just goes away with an electronic distribution model like this.

Ms. DELBENE. Thank you.

Mr. McCoskey, you had talked about increased usage of, you know, of, you know, videos, et cetera, given the UltraViolet service. Do you have similar metrics or ideas, in terms of what has happened in terms of consumer behavior?

Mr. MCCOSKEY. Well, I think it is actually really interesting, because when the media entertainment industry started looking at consumption and the changes in consumption, I think there was a big fear that people were going to get tablets and mobile devices and they were going to stop watching in their homes and they were going to stop watching linear television and broadcasts and all those things. And what the numbers have shown, in this country, is that people are just consuming more content.

So, the fact that they have got access to content, in more places on more devices actually has increased their consumption overall. Broadcast television viewing is up, you know, even though people are now watching more online and watching more on mobile devices. So, that won't continue indefinitely and, at some point, you know, people run out of hours in a day. But, right now, the fact that there is so much good content out there on so many different available legitimate platforms, people are embracing that.

Ms. DELBENE. So, as we see, kind of, movement to more centralize or, you know, cloud-based services and access to information, what concerns do either of you have in terms of privacy? These issues have come up a lot. Have you—in terms of how that may impact your business models.

Mr. MCCOSKEY. I am sure others want to answer this too.

That is, frankly, not the biggest concern for us, Ms. DelBene. It really is maintaining that open, nondiscriminatory Internet so that consumers continue to have the access that they have enjoyed to date on the Internet. And so, any kind of threat to that openness, including things like data caps, are a concern. They haven't been a problem so far, but it certainly is worth the vigilance of this Committee to make sure that that does not get into the way of—in the way of consumer access to that content.

Ms. DELBENE. Do others have feedback on that?

Mr. SOHN. Sure.

So, on privacy issues, I think it is sort of separate from the topic of this hearing. But, there is a very real need to address the basic privacy expectations of consumers to make sure that, as people go to these markets to participate in these increasingly thriving markets, they are not dissuaded by the amount of personal information that they have to turn over or uncertainty about how that information might be stored or passed along or used. So, I do think there is a role for Congress to look at privacy issues. And doing so would help build confidence in these lawful online marketplaces.

Mr. HOLST. I would just say that the release cycle of application publishing is at a much higher rate than a movie or a collection of music. And rather than doing focus groups and large surveys, there are analytics that are collected to allow for continuous improvement. And I don't think there are privacy concerns, as long as the application analytics are targeted for the developer of the application, you know, as a separate stream. So, the word "analytics" is thrown around a lot. Application developers need to have insight into how their software is being used to improve it. And I don't think there are concerns, but it just needs to be—people need to be mindful of why that telemetry is collected.

Ms. DELBENE. Thank you.

And I yield back, Mr. Chairman.

Mr. COBLE. The gentlelady's time is expired.

The distinguished gentleman from Georgia.

Mr. COLLINS. Thank you, Mr. Chairman, I appreciate it.

A lot of things, you know, have been said and some of this we have done before. And I think the industry working some of this out—you know having the, not only the vested interest but also other interests as well to make this work—is a good route to take.

And I want to turn my questions a little bit to, I think, the underpinnings of some of the discussion today, except for this first question. And it is going to go a lot to you, Mr. Sohn. We—you and I are going to have a conversation on some of it.

You had mentioned, and Mr. Holding had a great question, on the—concerning should the penalties be the same, you know, for the infringers. And you said, "Well, it depends on the scale." Well, can you define that for me? Okay, is it—if I infringe 20 times or if I put it out or copy and sell it 20 times, 30 times, 1 time, what scale is appropriate for them to be a similar penalty?

Mr. SOHN. Sure.

Excuse me, so, under current law, frequently penalties for copyright are civil.

Mr. COLLINS. Exactly.

Mr. SOHN. There is that civil enforcement. And then, when it reaches a certain threshold, we get to criminal enforcement. So, my only point really was that we don't want to be setting too low a bar for criminal enforcement. We want to make sure that criminal enforcement is targeted at the true bad actors, people that are doing things for a profit, people are doing things at substantial scale, not small-scale actors who are engaged in noncommercial behavior. So, I think we already have some standards for that, regarding the distinction between civil and criminal. And my only point was, for streaming, I don't think that the mode of delivery what is—is what is important. What is important is that the law draw that distinction and set an appropriate bar for criminal treatment.

Mr. COLLINS. Well, I think—and that is something that we are going to have to get—you know, elevate our different standards. I think, as we get into this new realm and we are looking at new areas, I think this is coming out as a question that needs to be addressed.

But I want to move on to something else. And I am not going to do digital First Sale. We could spend all day on that issue and how we get——

But, I read with interest, and I think it really goes to your written testimony, which I read and along with others. And it goes back to the issue, in my mind, of protection of rights and encouraging innovation and being a part of this process. And I think, in reading your written testimony, it became interesting to me, especially when you said, "Consumers are creators too, not just passive recipients." And, as I look through that, your—as I read through it, I came to this quote here and it says, "Of course, some manipulations of creative works can rise under issues under copyright law, but there is no question that the flexibility of digital technology facilitates greater involvement and interaction with creative works." I want to stop right there and I am going to come back to it.

And then you go on, just a little bit further, and talk about innovation in the marketplace, which is interesting. You start off by saying, "To be clear, the fact the consumer increasingly expect on demand access to the copyrighted content of their choice does not mean they are legally entitled to it any more than they would be entitled to get it all for free." But then, you come down by the end of that paragraph, you said, "But where the market fails to cater to substantial customer appetites, that represents lost opportunity. Everyone is better off in the market—if the market can develop new offerings that recognize what consumers want and find and provide a way for that."

And then, the next page over it says, "Encouraging the continued development of innovative business and technology is the most productive thing that Congress can do," and the reason was—the statement was, "evolving content providing convenient and attractive options for satisfying consumer demand is the best defense against widespread infringement."

In other words, what I gained from listening to this is, one—there are two parts that I would like for you to talk about. One, to have the creative manipulation by users, you have to inherently have a starting point to do that. They cannot—they are not creating in—according to what you framed your example, they are not creating ex nihlio. They are not creating from nothing. They are creating from what someone else has created. And, in your statement there was, is that the flexibility has caused this. And I think there has to be an understanding that there is a creative right there. And that there is a property right issue.

As you move through your testimony though, it seemed to go to the fact of this—that, if we can get it, then we should have a right to it. And I think that—I would like to hear your balance there. Because it seems to me you are, in some ways, you are contradictory in stating that there is a content right, you accept that.

But, as someone said, and I am not sure who it was and it may not have been anyone on this panel, said, "they were just slow to get the content out." Well, if I create something and I do not want to put it out that is my right. That is inherently the right of the creator to either expose it or not expose it, no matter if you desperately want it or not. How do you justify—or how do you come to these, basically, seemingly contradictory terms in your own written testimony.

Mr. MISENER. Sure.

So, what I was trying to get at there was I think there is a—it is, as you say, yes, if you create some content, you have legal rights to that content, you can control how to distribute it, when to distribute it and so forth. I do think, as a practical matter, where there is substantial demand in the marketplace to access certain content and people are willing to pay for that, everyone is better off if we can get to a marketplace where providers are able to provide to consumers the kinds of copyrighted content that they want when they want it and find lawful business models for doing that. That makes money for the creators. That gives consumers what they want. And, as a side effect and a very important side effect, it moves us more in the direction of a lawful content marketplace and discourages the unlawful content marketplace.

So, it is really—I think the contradiction you point to is me saying one hand, well there is a legal right and on the other hand, there is this practical consideration. And I think what I am trying to say is, as a practical matter, the best place for us to get to is for the producers to produce the content in a way that consumers want to enjoy it.

Mr. COLLINS. My time is expired. That is something I will address further, but thank you.

Mr. COBLE. I thank the gentleman.

The gentleman from Florida.

Mr. DEUTCH. I thank you, Mr. Chairman. Mr. Chairman, thanks for holding the hearing today.

I am glad to talk about the roles of copyrights in America. I think that this hearing is a great opportunity for us to challenge the notion that innovation and copyright protections are at odds or that content technology are looking to Congress to balance competing interests, far from it I think. Having access to movies and music gives people a reason to adopt the latest technology, the latest innovative platforms help creators reach audiences that they would never otherwise touch.

So, it seems like our goal as a Nation is to grow the pie for everyone fairly, instead of fighting about how we slice up what we see here today. I think our witnesses would agree. I believe the long-term success of our country depends on the work of inventors as well as artists and creators in moving the country forward, improving all of our lives with new medicines, technologies, shaping our culture. But, all of that progress and innovation is threatened when copyrights aren't protected.

So, Mr. Holst, I just wanted to follow up on something that you had spoken about. You talk about the enormous opportunities that digital content in the digital marketplace can offer. But your testimony referenced the problem of the uncurated app stores, where some app stores are more cooperative than others in removing infringing versions of pirated apps. As a victim of piracy yourself, you had to go through the process of trying to have illegal versions of your app removed. And I was hoping that you could just tell us a little bit more about what the process is like for a small business. What do you have to do? Are the stores—the app stores the same? Are some more or less cooperative? And, what is the response—what is their response, if they refuse to take action?

Mr. HOLST. Thank you.

Well the question is an excellent one and has a number of different parts—they always have a number of different parts. The trickiest part is the discovery. Okay, if somebody steals your content and then markets it in a way that isn't your brand name, you might not find it amongst the millions of apps that are available. So, discovery is a challenge, and that is not a legal question, it is just the hard thing to do.

Once I discovered it, and I discovered it quite accidentally. I was just seeing who was beating me in my category. And the cover page was actually different. Out of the corner of my eye, I saw a phrase that I use. I drilled down and literally saw pictures of my wife, who is the yogi in the app. And I said, this is definitely infringement. I will have no problem proving this. And, in fact, I didn't. And I—it was—I was provided with some forms to fill out. And, within 48 hours, the app was removed.

However, the bad actor, the publisher themselves, were not banned from any of the marketplaces. And in fact I looked—this was 2 years ago and that publisher still publishes apps. And, if I look at what is in those apps, they are language translation services, the Bible for children. Clearly, in my view, content that they likely have, I can't prove it, but they have likely lifted, right?

And so the question of finding the infringement is hard. Once you find it, I think it is fairly straightforward. And everybody wants to do the right thing. But then the question is: what do you do when you don't have proof around other apps and those bad actors? Because they can put on all sorts of veils and hide themselves. That is a difficult challenge as well.

Mr. DEUTCH. Does it make a difference in the nature of the store? Uncurated—having someone——

Mr. HOLST. Yeah. And so—great point. So, the question isn't how quickly they respond, although uncurated they tend to just have less of an infrastructure to interact with publishers. The real danger there is that the quality of the basic—the original inventory. So, if I look at a thousand apps in one of these uncurated marketplaces—and there are a number of studies, I will be happy to send those on, that show that not just infringing content, but apps that violate privacy have unexpected behaviors significantly higher. So, it is a more dangerous neighborhood to visit. And so you are more likely as a consumer to get something dangerous. Not now as a publisher, but as a consumer. That is the——

Mr. DEUTCH. And thank you.

Mr. Misener, I just wanted to circle back. There are a lot of phrases that get thrown around on our committees, particularly in this area. The nondiscriminatory Internet—what is your definition of the nondiscriminatory Internet?

Mr. MISENER. It is ensuring that network operators don't interfere with their users' ability to obtain content from the sites and sources of their choice. And so, basically, end users, you and I in our homes, have a contract with a network operator to have Internet access. Through that contract, that end user ought to be able to access all the lawful content that he or she wants.

Mr. DEUTCH. But it wouldn't be discriminate or discrimination against copyright infringers would be permitted, wouldn't it?

Mr. MISENER. Yeah, I said lawful.

Mr. DEUTCH. Right.

Mr. MISENER. So, correct. So all the lawful content they should be entitled to reach. And the discrimination concern is very real, especially where some network operators are also the provision of—the provisioners of competing video and content services. And so, if they are providing services in parallel with the services that their customers want, that would be untoward. And that is something that I think the Committee should keep an eye on.

Mr. DEUTCH. I appreciate that.

Thank you, Mr. Chairman.

Mr. COBLE. Thanks gentlemen.

I thank the witnesses and I thank those in the audience. As I said, your presence here for the past 2 hours, indicates more than a casual interest in this very significant issue.

Without objection, all Members will have 5 legislative days to submit additional written questions for the witnesses or additional material for the record.

This hearing stands adjourned.

[Whereupon, at 3:26 p.m., the Committee was adjourned.]

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